



Commentary Article

Which is the Role of Electronic Cigarettes in the Fight Against Smoking?

Fabio Beatrice*

Scientific Director Of MOHRE (Mediterranean Observatory On Harm Reduction), Turin, Italy

Abstract

The most recently published data on the effectiveness of electronic cigarettes (E-cig) in the context of risk reduction proposals are reviewed. Such a proposal should be aimed at heavy smokers who refuse or fail the cessation processes. Reducing the exposure to Harmful or Potentially Harmful Components (HPHCs) generated by the combustion of cigarettes, hence having the potential for a relative reduced risk of harm has the potential to save many lives and should be used transparently as part of policies to help heavy smokers without being confused with policies to block initiation aimed at adolescents and young adults.

Commentary

Harmful or Potentially Harmful Components (HPHCs) which are generated by the tobacco combustion and are present in cigarettes smoke are the main cause of smoking-related diseases whilst the nicotine addiction is the reason why people smoke but has a limited impact on tobacco-related morbidity and mortality [1,2].

Tobacco harm is posed by about 70 certain carcinogenes and by over 7000 toxicants that are present in cigarette smoking [3-8].

Despite this certainty and despite the fact that 7 million people die every year in the world as a result of smoking, reducing the damage deriving from the burning of tobacco still remains a controversial topic.

About a year ago we asked ourselves whether it was still possible to go without risk reduction strategies and without the use of electronic cigarettes (E-cigs) in the fight against smoking [9].

*Corresponding author: Fabio Beatrice, Scientific Director Of MOHRE (Mediterranean Observatory On Harm Reduction), Turin, Italy Tel: +393357112445; Email: fabiobeatrice1955@gmail.com

Citation: Beatrice F (2024) Which is the Role of Electronic Cigarettes in the Fight Against Smoking?. J Community Med Public Health Care 11: 144.

Received: January 17, 2024; Accepted: January 25, 2024; Published: February 01, 2024

Copyright: © 2024 Beatrice F. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Meanwhile, in Great Britain, since some years, E-cigs had taken on a very significant role in the fight against cigarette smoking [10].

Lately, very significant and completely independent studies have produced very convincing answers to this question.

Already at the end of 2022, a systematic review by Cochrane Library examined 40 randomized studies with a total of 22,052 participants, concluding that there was high certainty evidence that E-cigs with nicotine increased cessation rates compared to nicotine dispensed in pharmacological way [11], and that has been confirmed in the latest available update of such review [12].

Nicotine is the most used drug in the world for managing the addiction of smokers trying to quit. Data from a US survey, showed that during a 2-year follow-up (the longest period measured so far), the use of E-cigs was substantially free of adverse events and there was no evidence of significant harm from nicotine taken via an electronic device [13].

In February 2023, in their Commentary in Nature Medicine, Warner KE *et al.* pointed out that both in the United Kingdom and in the United States an increase in smoking cessation of 10-15% was associated with the use of E-cigs [14]. Those smokers who frequently used E-cigs were significantly more likely to quit smoking than smokers who did not vape [14]. Even the US Centers for Disease Control and Prevention reported that smokers were more likely to use E-cigs in their quit attempts than any other product, including Food and Drug Administration (FDA)-approved smoking cessation medications [14]. This paper also confirmed a 95% reduction in toxicants, usually produced by combustion products, in electronic aerosol [14].

In September 2023, a new systematic review by the Cochrane Library was published and showed that E-cigs and some drugs such as varenicline and cytisine were more likely to help people quit smoking. According to this review, for every 100 people, 10 to 19 were likely to stop smoking using E-cigs; 12 to 16 using varenicline; and 10 to 18 using cytisine [15].

Supporting the usefulness of nicotine consumption in the absence of combustion, an in-depth review was recently published which found that the health risks associated with the use of Snus, in which nicotine is decoupled from tobacco smoke, are significantly lower than those associated with cigarette smoking. The use of Snus in Sweden has proven effective in reducing the incidence of lung cancer and cardiovascular diseases: diseases for which combustion is the main culprit. This has led to calls for a review of the EU ban on the marketing and sale of Snus which represents a form of harm reduction in heavy smokers with public health benefits [16].

These concepts are supported by the opinion of authoritative International experts who have recently reviewed the available evidence in terms of Tobacco Harm Reduction (THR). Correct information for adult smokers on smoke-free products is hoped for, precisely in the already quoted commentary published in Nature Medicine [14].

Further evidence on the fact that smoke-free systems can represent, for adult smokers, an effective application of the principle of harm reduction regards not only E-cigs but also Heated Tobacco Products (HTPs) which appear to be equally efficient in guaranteeing rates cessation rate of around 40%, at least in the short term [17].

We had already asked ourselves about the methods of using E-cigs in a clinical setting in 2015 [18]. We showed that in a smoking cessation setting it was possible to intervene to help heavy smokers resistant to quitting using a E-cigs supported by specific counseling according to the procedure called MB and protected but European trademark [18].

On the basis of such growing evidence, ignoring E-cigs and more generally a risk reduction proposal in the context of policies to help heavy smokers is no longer possible both on a clinical and a scientific level.

It is believed that risk reduction proposals should be aimed at adult smokers resistant to the cessation proposal and that they should not be confused with policies to block tobacco smoking initiation aimed at adolescents and young adults.

Conflicts of interest

I declare that I have no conflicts of interest.

References

- Food and Drug Administration (FDA) (2020) Chemicals in Tobacco products and your health.
- UK Health Security Agency (2020) 8 things to know about e-cigarettes.
- Shahab L, Jarvis MJ, Britton J, West R (2006) Prevalence, diagnosis and relation to tobacco dependence of chronic obstructive pulmonary disease in a nationally representative population sample. *Thorax* 61: 1043-1047.
- Pan B, Jin X, Jun L, Qiu S, Zheng Q, et al. (2019) The relationship between smoking and stroke: A meta-analysis. *Medicine* 98: e14872.
- Stallones RA (2015) The association between tobacco smoking and coronary heart disease. *Int J Epidemiol* 44: 735-743.
- National Center for Chronic Disease Prevention and Health Promotion (US) Office on Smoking and Health (2014) (The Health Consequences of Smoking-50 Years of Progress: A Report of the Surgeon General. Atlanta (GA): Centers for Disease Control and Prevention (US).
- Beatrice F, Rossi Mason J, Massaro G (2020) Tobacco Harm Reduction: in pursuit of awareness and training for Health Care Professionals. *J Community Med Public Health Care* 7: 065.
- Food and Drug Administration (FDA) (2019) Harmful and Potentially Harmful Constituents (HPHCs).
- Beatrice F, Albera A, Rossi Mason J (2022) Can you do without Risk Reduction In the fight against smoking? *J Community Med Public Health Care* 9: 119.
- Office for Health Improvement and Disparities (OHID), UK. Nicotine vaping in England: 2022 evidence update.
- Hartmann-Boyce J, Lindon N, Butler AR, Bullen C, Begh R, et al. (2022) Electronic Cigarettes for smoking cessation. *Cochrane Database of Systematic Reviews* 4: CD010216.
- <https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD010216.pub8/full>
- Kalkhoran S, Chang Y, Rigotti NA (2020) Electronic cigarette use and cigarette abstinence over 2 Years Among U.S. smokers in the Population Assessment of Tobacco and Health Study. *Nicotine Tob Res* 22: 728-733.
- Warner KE, Benowitz NL, McNeill A, Rigotti NA (2023) Nicotine e-cigarettes as a tool for smoking cessation. *Nat Med* 29: 520-524.
- Lindson N, Theodoulou A, Ordonez-Mena JM, Fanshawe TR, Sutton AJ, et al. (2023) Pharmacological and electronic cigarette interventions for smoking in adults: component network meta-analyses. *Cochrane Database of Systematic Reviews* 9: CD015226.
- Clarke E, Thompson K, Weaver S, Thompson J, O'Connell G (2019) Snus: A compelling harm reduction alternative to cigarettes. *Harm Reduct J* 16: 62.
- Caponnetto P, Campagna D, Maglia M, Benfatto F, Emma R, et al. (2023) Comparing the effectiveness, tolerability, and acceptability of Heated Tobacco Products and refillable Electronic Cigarettes for cigarette substitution (CEASEFIRE): Randomized Controlled Trial. *JMIR Public Health Surveill* 9: e42628.
- Pacifici R, Pichini S, Graziano S, Pellegrini M, Massaro G, et al. (2015) Successful nicotine intake in medical assisted use of E-Cigarettes: A pilot study. *Int J Environ Res Public Health* 12: 7638-7646.



- Advances In Industrial Biotechnology | ISSN: 2639-5665
- Advances In Microbiology Research | ISSN: 2689-694X
- Archives Of Surgery And Surgical Education | ISSN: 2689-3126
- Archives Of Urology
- Archives Of Zoological Studies | ISSN: 2640-7779
- Current Trends Medical And Biological Engineering
- International Journal Of Case Reports And Therapeutic Studies | ISSN: 2689-310X
- Journal Of Addiction & Addictive Disorders | ISSN: 2578-7276
- Journal Of Agronomy & Agricultural Science | ISSN: 2689-8292
- Journal Of AIDS Clinical Research & STDs | ISSN: 2572-7370
- Journal Of Alcoholism Drug Abuse & Substance Dependence | ISSN: 2572-9594
- Journal Of Allergy Disorders & Therapy | ISSN: 2470-749X
- Journal Of Alternative Complementary & Integrative Medicine | ISSN: 2470-7562
- Journal Of Alzheimers & Neurodegenerative Diseases | ISSN: 2572-9608
- Journal Of Anesthesia & Clinical Care | ISSN: 2378-8879
- Journal Of Angiology & Vascular Surgery | ISSN: 2572-7397
- Journal Of Animal Research & Veterinary Science | ISSN: 2639-3751
- Journal Of Aquaculture & Fisheries | ISSN: 2576-5523
- Journal Of Atmospheric & Earth Sciences | ISSN: 2689-8780
- Journal Of Biotech Research & Biochemistry
- Journal Of Brain & Neuroscience Research
- Journal Of Cancer Biology & Treatment | ISSN: 2470-7546
- Journal Of Cardiology Study & Research | ISSN: 2640-768X
- Journal Of Cell Biology & Cell Metabolism | ISSN: 2381-1943
- Journal Of Clinical Dermatology & Therapy | ISSN: 2378-8771
- Journal Of Clinical Immunology & Immunotherapy | ISSN: 2378-8844
- Journal Of Clinical Studies & Medical Case Reports | ISSN: 2378-8801
- Journal Of Community Medicine & Public Health Care | ISSN: 2381-1978
- Journal Of Cytology & Tissue Biology | ISSN: 2378-9107
- Journal Of Dairy Research & Technology | ISSN: 2688-9315
- Journal Of Dentistry Oral Health & Cosmesis | ISSN: 2473-6783
- Journal Of Diabetes & Metabolic Disorders | ISSN: 2381-201X
- Journal Of Emergency Medicine Trauma & Surgical Care | ISSN: 2378-8798
- Journal Of Environmental Science Current Research | ISSN: 2643-5020
- Journal Of Food Science & Nutrition | ISSN: 2470-1076
- Journal Of Forensic Legal & Investigative Sciences | ISSN: 2473-733X
- Journal Of Gastroenterology & Hepatology Research | ISSN: 2574-2566
- Journal Of Genetics & Genomic Sciences | ISSN: 2574-2485
- Journal Of Gerontology & Geriatric Medicine | ISSN: 2381-8662
- Journal Of Hematology Blood Transfusion & Disorders | ISSN: 2572-2999
- Journal Of Hospice & Palliative Medical Care
- Journal Of Human Endocrinology | ISSN: 2572-9640
- Journal Of Infectious & Non Infectious Diseases | ISSN: 2381-8654
- Journal Of Internal Medicine & Primary Healthcare | ISSN: 2574-2493
- Journal Of Light & Laser Current Trends
- Journal Of Medicine Study & Research | ISSN: 2639-5657
- Journal Of Modern Chemical Sciences
- Journal Of Nanotechnology Nanomedicine & Nanobiotechnology | ISSN: 2381-2044
- Journal Of Neonatology & Clinical Pediatrics | ISSN: 2378-878X
- Journal Of Nephrology & Renal Therapy | ISSN: 2473-7313
- Journal Of Non Invasive Vascular Investigation | ISSN: 2572-7400
- Journal Of Nuclear Medicine Radiology & Radiation Therapy | ISSN: 2572-7419
- Journal Of Obesity & Weight Loss | ISSN: 2473-7372
- Journal Of Ophthalmology & Clinical Research | ISSN: 2378-8887
- Journal Of Orthopedic Research & Physiotherapy | ISSN: 2381-2052
- Journal Of Otolaryngology Head & Neck Surgery | ISSN: 2573-010X
- Journal Of Pathology Clinical & Medical Research
- Journal Of Pharmacology Pharmaceutics & Pharmacovigilance | ISSN: 2639-5649
- Journal Of Physical Medicine Rehabilitation & Disabilities | ISSN: 2381-8670
- Journal Of Plant Science Current Research | ISSN: 2639-3743
- Journal Of Practical & Professional Nursing | ISSN: 2639-5681
- Journal Of Protein Research & Bioinformatics
- Journal Of Psychiatry Depression & Anxiety | ISSN: 2573-0150
- Journal Of Pulmonary Medicine & Respiratory Research | ISSN: 2573-0177
- Journal Of Reproductive Medicine Gynaecology & Obstetrics | ISSN: 2574-2574
- Journal Of Stem Cells Research Development & Therapy | ISSN: 2381-2060
- Journal Of Surgery Current Trends & Innovations | ISSN: 2578-7284
- Journal Of Toxicology Current Research | ISSN: 2639-3735
- Journal Of Translational Science And Research
- Journal Of Vaccines Research & Vaccination | ISSN: 2573-0193
- Journal Of Virology & Antivirals
- Sports Medicine And Injury Care Journal | ISSN: 2689-8829
- Trends In Anatomy & Physiology | ISSN: 2640-7752

Submit Your Manuscript: <https://www.heraldopenaccess.us/submit-manuscript>