

## Review of: "Nicotine pouches- a research and regulatory policy agenda to maximise public health benefits and minimise harms"

David Timberlake<sup>1</sup>

1 University of California, Irvine

Potential competing interests: The author(s) declared that no potential competing interests exist.

Review of manuscript submitted to Qeios June 7, 2021

Nicotine pouches – a research and regulatory policy agenda to maximize public health benefits and minimize harms (Patwardhan & Fagerstrom)

The authors provided a comprehensive overview of nicotine patches and their potential for harm reduction through a proposed regulatory policy agenda. The article is well written, organized, and timely. The primary issue regarding the harm reduction potential of nicotine pouches, in my opinion, is for tobacco consumers to be able to differentiate the new products from both their pharmaceutical counterparts (e.g., nicotine lozenge, tablet & other NRTs) and smokeless tobacco (SLT) pouches. The authors do indeed highlight the differences between products, citing the long-standing concern that NRTs do not deliver a dose of nicotine comparable to the cigarette. But, I recommend that the authors address the other reasons why smokers who make a quit attempt do not use an NRT. These reasons include a high perceived cost and misperception about nicotine harm, the latter of which was addressed in the section on nicotine literacy. Regarding the former, it would be helpful to include a brief comparison of costs of the nicotine pouches, NRTs and SLT products. It is worth mentioning that since the nicotine pouches are not regulated as cessation products, they will not be reimbursed through public or private insurance. The issue concerning nicotine literacy is not limited to healthcare providers and policymakers. In fact, several U.S. studies have reported that racial/ethnic minorities who smoke have a higher misperception of nicotine harm relative to non-Hispanic white smokers. The authors should consider addressing the need for improving nicotine literacy among the tobacco consumers, particularly racial/ethnic minorities. I think it is also important for the authors to address briefly the challenges of marketing the nicotine pouches as an alternative to NRTs, since the former are not regulated as a cessation product.

If smokers perceive the advantage of using nicotine pouches vs. NRTs (e.g., with respect to pharmacokinetics), they may still be reluctant to use the new products because of their similarity in use and appearance (Figure 1) to snus and other SLT pouches. Qualitative research in the U.S. suggested that



snus would not be popular among smokers because of the product's association with traditional SLT on the U.S. market (despite being spit-less). This observation appears to be consistent with the findings by Plurphanswat et al. (2020), which indicate that most users of nicotine pouches are current SLT users. This begs the question of whether the nicotine pouches should be primarily marketed to cigarette smokers or SLT users. The authors highlighted the potential for the nicotine pouches to serve as a less harmful alternative to SLT for the 200 million current users of SLT in India. Perhaps, the authors should focus their policy recommendations on countries in South Asia where SLT use is most prevalent and harmful. Otherwise, the nicotine pouches may experience the same fate as snus in countries like the U.S. where the market share of low-nitrosamine SLT has been rather disappointing.