

Review of: "Tobacco- and Nicotine-Containing Product Use in Italy: Results From Two Cross-Sectional Studies"

Fabio Beatrice¹

¹ Polytechnique Montréal, Montréal, Canada

Potential competing interests: No potential competing interests to declare.

The data collected by the Authors are quite unique regarding adult subjects who have independently decided to switch from cigarettes to HTPs in Italy.

Even though the 2 surveys (with all the common limitations of cross-sectional studies vs observational longitudinal ones), as stated by the Authors themselves, have some limitations mainly consisting of the potential bias due to self-reported measures and some difficulties in being sure that the results are actually generalizable to all Italian HTPs users, nevertheless they are adding precious information on the behaviors of smokers who have decided to switch to smoke-free products and the personal perception of benefit after having taken such a decision, supporting with real-life data the concept of tobacco risk reduction in adults who have decided to continue smoking.

The methodology (sample selection and way of conducting the interviews - CASI & online interviews) chosen by the Authors for conducting the surveys and collecting the data appears appropriate for the purpose of the study, just as the type of analysis which, due to its cross-sectional nature, can only be descriptive.

The use of specific questionnaires for assessing the tobacco- and/or nicotine-containing products (TNPs) use is adding useful insights not only on TNPs use but also on risk perception and self-reported respiratory symptoms, exercise capacity level, and hygiene-beauty-fitness status after switching from cigarettes to HTPs.

The results of the two surveys, conducted in different and consecutive periods (2018-19 and 2019-20), are generating very similar results, adding robustness to the insight we can take from that. It is worth noting that the global sample of participants is the widest ever available in the literature for Italian HTPs users (12,213 adult Italian smokers in the general population + 2,772 adult Italian HTPs users).

The key findings of the two surveys can be highlighted as follows:

- a. Cigarettes are still the most used TNPs (24.3%) by the general Italian population, whilst the use of smoke-free products is very limited (range 0.7-1.4%). This could be considered unfortunate by a scientific supporter of the Tobacco Harm Reduction (THR) principle but is in contrast with the concern of an alarming increase in the use of smoke-free products which is often communicated by the media (and by some members of the health Authorities) and is mainly unsupported by the current available evidence in the literature.
- b. Nearly all current HTPs users were adult cigarette smokers when they started using the product, which confirms the

findings of other independent studies. Also, the low initiation, re-initiation, and relapse observed with HTPs are in line with previous findings. This is quite reassuring as one of the main concerns of Italian physicians and Health Authorities is the so-called gateway effect which can be played by smoke-free products. The data shown in these surveys is instead supporting the concept of a substitution effect, in line with the THR principles.

- c. Dual use of HTPs and combustible TNPs has been limited to about 39%, with a rate of exclusive use which was 59% (38.6%). Dual use, *per se*, should not always be seen as completely negative as it can be a step in the pathway of progressive cessation of smoking combustible products; however, an exclusive use of about 60% should be quite reassuring to those who think that the rate of dual use of smoke-free products in Italy can reach up to 80%. These data do not confirm it.
- d. Even if self-reported and self-perceived, the benefit on various health indicators in subjects who have switched to HTPs from cigarettes is remarkable: improved respiratory symptoms, exercise capacity, breath smell and taste, and reduced teeth discoloration and staining are important real-life signals of health benefit which are certainly reinforcing subjects' decision to switch to such products, limiting the risk of relapsing into smoking.

Taken together, all such results are substantiating the concept that smoke-free products, and specifically HTPs, can really represent a viable and acceptable alternative to cigarette smoking, thus playing a considerable role in a tobacco harm reduction approach.

Clearly, the data collected by the authors are not providing an answer on whether switching to smoke-free products can reduce the clinical risk and then the harm of development of tobacco-related diseases compared to cigarettes, particularly in the long term, but that was not the purpose of the study. Longitudinal studies will hopefully give us an answer to this question as well. Finally, this approach seems interesting in terms of reducing the risk of combustion, although it does not remain decisive in controlling nicotine addiction.