

Review of: "Randomized Experimental Test of a Reduced-Exposure Message for an E-cigarette: Comprehension and Related Misperceptions"

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Potential competing interests: No potential competing interests to declare.

Preprint Review:

Stacey McCaffrey et al:

Randomized Experimental Test of a Reduced-Exposure Message for an E-cigarette: Comprehension and Related Misperceptions

The topic of preprint is actual, the reduced exposure, originating from different nicotine abuses is important from public health aspects. The structure of preprint is similar as it is used at scientific publications. **The abstract** is clear, short and summarises how the different smoker and non-smoker groups of large population understood the differences of smoking customs to achieve exposure reduction of harmful chemicals using different JUUL-brand ENDS.

The introduction summarises the previous scientific data which proved that except for nicotine, exposure to potentially toxic substances from ENDS is significantly lower than that from combustible cigarettes. But later this phrase: "ENDS have no toxicant exposures at all." need correction, because the nicotine itself have dose dependent toxic effects. At combustible cigarette smoking (or at other inhalative nicotine use) the ciliary movement will be stopped, and at higher doses (which occur easy at JUUL) the bronchiolospasm happen! At combustible cigarette smoking the carbon monoxid (CO) is the short and long term toxic gas, causing persistent alveolitis which isn't present at ENDS! This is the final, most import information for smokers in understanding the basic differences between the ENDS and combustible cigarette use, and this is the cause that smokers need to switch completely away from smoking to achieve the full benefit of ENDS. So it is advisable for authors to modify the text in introduction and in other sections of preprint where it is needed as follow: „Except of nicotine effects, the ENDS have no toxicant exposures at all.” (It could be useful later in the authorized FDA message for dissemination,)

In materials and methods section the design, population selection and methodology is well described, but real clinical experiments not happened. In this online study the effect of similar video with and without statement about reduced exposure to harmful chemicals has been tested on large group of adult population as it is summarised in table 1. The next sections (video stimuli, outcome measures, message comprehension, absolute risk misperceptions, Perception of Intended Audience, Health literacy, and Analysis) are detailed.

In results section, in the summary of tobacco group members, (table 2) a high number of females (54,5%) presents the real public health risk of smoking, which causes lower infertility and fetal developmental troubles. Especially this group needed transition to ENDS because they are married or living with partner (see later in Table II.)

The message comprehension section is detailed, but a bit long. (It would be useful for example to construct one diagram from a, and b parts of figure 2. Abbreviations below the table II and IV are not used in these tables.)

The discussion section is also too long, there are some repetitions from former sections. The first 2 and 7-10 paragraphs are basically sufficient for discussion.

Summary: Although the topic of preprint has a lot of information about the comprehension of reduced exposure messages for ENDS especially for smokers, the scientific content is low. The presented data are similar to that which are needed for better marketing of ENDS.