Call for posters - "International conference on the E-Cigarette: patterns of use and health impacts"

Call for posters
"International conference on the E-Cigarette: patterns of use and health impacts" - Paris, on 5-6th December 2022

Submission form

—
NB: Please fill out one form for each abstract

Contact details of the corresponding author or organiser

Title

Mr

First name

Thad

Last name

Hannel

E-mail

Thaddaeus.Hannel@altria.com

Institution / company

Altria

Unit / department

Regulatory Affairs

Address

601 East Jackson Street
Richmond, VA, 23219
United States

Background information

Theme of conference

Health impact

Keywords (please select 3 keyworks to confirm your choice)

Health impact   Perceptions, reprentations, beliefs   Public health

Abstract title

Modeling the Population Health Impact of Nicotine Perceptions

Author's contact details :

Title

Mr

First name

Thad

Last name

Hannel

E-mail

Thaddaeus.Hannel@altria.com

Institution / company

Altria

Co-author's contact details :

Number of co-authors

3

Co-author 1

Lai Wei Altria

Co-author 2

Raheema Muhammad-Kah Altria

Co-author 3

Edward Largo Altria

Abstract details

Background, method, results and conclusions

Background: The majority of U.S. adult smokers inaccurately believe that nicotine is the primary chemical responsible for the harm caused by smoking. Misperceptions regarding the role of nicotine may be a significant obstacle to adult smokers' switching to potentially reduced-harm, smoke-free products and ultimately result in population harm. Method: We applied a previously developed agent-based model to the U.S. population. A Base Case model was developed using estimates of cigarette smoking initiation, cessation, and switching rates to exclusive smoke-free product use (e-cigarettes, smokeless tobacco, and/or snus). We analyzed nationally representative data from the Population Assessment of Tobacco and Health (PATH) Study to estimate the overall rate of switching from smoking to smoke-free product use. We then stratified this rate based on nicotine perceptions as assessed by responses to the question "Do you believe nicotine is the chemical that causes most of the cancer caused by smoking cigarettes?" (R04_AC9120). Nicotine perception scenarios were modeled based on the relative differences between the overall and stratified rates. The public health impact of nicotine perceptions was estimated as the difference in all-cause mortality between the Base Case and the nicotine perception scenarios. Results: We find that adjusting switch rates to align

with correct nicotine perceptions results in nearly 700,000 premature deaths prevented over an 85-year period. Modeling also indicates that holding incorrect perceptions about nicotine may contribute to premature deaths that might have otherwise been prevented. Conclusions: Nicotine misperceptions are associated with lower rates of switching to potentially reduced-harm smoke-free products. While limitations of predictive models must be considered when drawing inferences, our results suggest promoting public education to correct misperceptions has potential to benefit population health.

Main messages

Modeling U.S. adult smokers' behavior based on their beliefs of nicotine harm indicates that correcting their nicotine misperceptions can result in a public health benefit and failing to do so can cause harm.

Type of study / research

Original study

Geography of the study

Outside Europe

Funding of study

Federal source

No

State source

No

Nonprofit Grant Funding Entity Source

No

Nonprofit Grant Funding Entity Source

No

Academic Institution Source

No

Pharmaceutical Industry Source

No

Tobacco/E-Cigarette Industry Source

Yes

Declaration of interest

The submitter declares that during the past 5 years have a direct nor indirect link (professional*, personal or financial**) with the tobacco and e-cigarette companies

Yes

If yes, please specify

Employed by Altria (tobacco company).