
INGSA WORKSHOP MATERIALS

NICOTERIA:

E-cigarettes as a public health strategy

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VARIOUS TYPES OF E-CIGARETTES

NICOTERIA:

E-cigarettes as a public health strategy

Note: materials in this case are fictional and should not be taken to represent real-life people, places or events.

Nicoteria is a rapidly developing country in Africa. It has a population of 65 million and a GDP per capita of US\$4950 and is rising at a rate of about 7% per annum. The country is rapidly urbanising and the impact of foreign culture is particularly evident among young urban men and women. Smoking rates are rising rapidly such that 17% of urban Nicoterians between the ages of 15 and 25 smoke cigarettes (double that of ten years ago) and rates are even higher among 25-40 year olds. A major multinational tobacco company (Atlantic Tobacco Company or ATC) has a long established presence in Nicoteria, with tobacco production a significant contributor to the national Nicoterian economy. ATC is the dominant producer of cigarettes sold in Nicoteria and neighbouring countries as well as an industry leader internationally. ATC has stated in its public shareholder briefings that, with declining tobacco usage in other parts of the world, they see promise in a massively expanded market in Africa.

Background and context

Within the UN Sustainable Development Goals framework (Goal #3), the WHO, UNDP, African leaders and health officials are demonstrating increasing concern and leadership about the rising rates of respiratory illness, heart disease and lung cancer in Sub-Saharan Africa. Heart disease is now the single largest cause of death in Nicoteria. Smoking has been controlled in all publicly administered buildings, beginning with airports, schools and hospitals, but smoking rates continue to rise. Some attempts at smoking cessation campaigns have been made using social media, but these have had little impact.

A visiting professor to Nicoteria's leading Medical School from a major European University has suggested to the Minister of Health that the introduction of electronic cigarettes would be beneficial as a harm reduction strategy. She points to a well-known study from the UK that suggests that e-cigarettes are a successful way to stop smoking. Use of e-cigarettes would allow individuals to address and taper their nicotine addiction while immediately reducing their exposure to harmful tars. At the same time however, a visiting US professor at the medical school opposes the introduction of e-cigarettes, pointing to a USA study that points to e-cigarettes as a 'gateway' to conventional smoking in that teenagers who start smoking with e-cigarettes will soon move to ordinary cigarettes. The local office of an international health NGO working among urban Nicoterian youth argues that the long-term safety of e-cigarettes is unproven – particularly as the filament can release heavy metals that can be inhaled. In any case, they say, the higher-end electronic devices are out of reach financially to the target demographic.

Recently a local start-up called "BreakFree" has designed a prototype e-cigarette device specifically for the African market, which is aimed at affordability and safety (by allegedly lowering exposures to heavy-metals and other toxins). BreakFree has secured some notable Nicoterian investors and politically powerful philanthropists to support their research and development phase. With these well-

placed connections, BreakFree is also pressuring the Nicoterian Ministry of Health to approve its product for sale to the public. BreakFree has teamed up with another Nicoterian company - a manufacturer of generic medicines – to produce the liquid nicotine capsules for the devices. They have also enlisted the help of a group of researchers at Nicoterian national university, both to develop new varieties of capsules as well as to help build the public health case for their product..

The dilemma

ATC, which is a major contributor to Nicoterian GDP, is opposing the licensing of the locally-made e-cigarette. Despite having diversified their own product lines to include a highly successful (though expensive) range of electronic cigarettes for the European market, it is clear that the company sees Africa as the key (and growing) market for its traditional product – conventional cigarettes. The head of the company’s African division is strongly hinting to Nicoterian government officials that approval of the domestic e-cigarette would lead to the company reducing its tobacco plantation and processing facilities in Nicoteria and expanding these operations instead in neighbouring country. At the same time, the company has undertaken its own research about what it is calling ‘artisanal’ e-cigarette devices. Further, a not-so-subtle plot about the apparent ‘dangers’ (heavy metals, no filters, improper mixtures) of these cheap and unregulated devices has appeared in a popular television drama that the tobacco company sponsors.



The role of scientific advice

The Nicoterian Academy of Science (NAS) has been asked to give advice to Cabinet on the safety and use of e-cigarettes and whether locally made electronic devices are less safe than the range of available devices produced by ATC. They wish to know whether the NAS thinks they should license the introduction of e-cigarettes and under what conditions. What considerations should be taken into account in preparing the Academy’s report?

GROUP EXERCISES

Exercise 1: Group discussion

What issues does the National Academy need to consider in preparing response?

- Communication of complex science
 - Who are all the stake-holders?
 - How to get to the various groups?
 - How to handle media and other channels of communication?
- How secure is the evidence?
 - Is there a difference between government-led science and science undertaken by the academy and that provided by companies?
 - What are the elements of knowledge brokerage that come into play?
 - What we know
 - What we do not know
 - Risks of action or inaction
 - Alternate approaches
 - Trade-offs
- Science advice vs. advocacy
 - The evidence of adverse health effects due to smoking is well documented. So too are the epidemiological data on rising rates of smoking among young people in Africa. What role (if any) does a science advisor play in building the case for government support for e-cigarettes?
 - To what extent should science advice argue for a particular public health intervention over any other, to a recognised public health concern? How should science advice treat the options?
- Issue of social license
 - Is the science stronger or more uncertain for one public health intervention option or the other? What considerations are there about the extent of uncertainty?
 - How should the Academy's committee deal with the research that is being promoted by the tobacco company through popular culture (TV and radio programmes)?
- Other considerations?
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Exercise 2: Role-playing

Listed in no particular order, the following perspectives (participants may identify others) have been outlined for use in a role playing exercise. Participants are divided into groups and encouraged to both consider the perspective of various actors as listed, but also what the science advisor or advisory body might do in each situation.

Perspective 1: National Academy

- What perspectives and considerations should be reflected in any advice given?
- What is the role of the national academy?
- What might be the limits to the academy's role in this case?

Perspective 2: Media

- The national current affairs programme wishes to host a debate about e-cigarettes as a public health harm reduction intervention. They have invited the visiting UK and US professor who hold opposing views on the matter, as well as Chair of the National Academy. What might be the key considerations for the Chair in this debate?
- How should differing scientific views best be explained to the public?

Perspective 3: BreakFree (local e-cigarette producer)

- You are the director of government relations at the small start-up company "BreakFree", which produces an affordable e-cigarette aimed at the young African market. Your organisation has engaged local scientists to review the available public health evidence about the impacts of e-cigarettes and 'advise on the advice'. What would you consider a fair and robust public discussion?
- What would the science advisor consider a fair and robust discussion in this regard? How could this be achieved?

Perspective 4: Big Tobacco Company

- The regional representative for the Tobacco Company has submitted the company's own research for consideration by the National Academy's expert panel and has requested a meeting with the panel. How could this be handled?
- What might the science advisory panel consider a fair and robust discussion with the representative and vice versa?

Perspective 5: Public Health Officials

- You are the medical officer within the Nicoteria ministry of public health. What would you hope to get out of the expert panel report? What additional considerations might you bring to their deliberations about the relative merits of e-cigarettes as a harm reduction approach and/or about approaches to smoking cessation? How will you incorporate the panel's findings and recommendations into your work?

Perspective 5: Politicians

- As Prime Minister you have received the advice and followed the media reports (and social media) on the issue. How are you incorporating science into your thinking? How does science advice figure among the various considerations in your decision-making
- How should the Academy's expert committee best deliver advice to the Prime Minister of Nicoteria?

Other perspectives?

Exercise 3: Some further considerations for discussion:

- What are the trade-offs of licensing the locally developed e-cigarette or not licensing it?
- To what extent is the science advisor/advisory body also an advocate for one option or another where the public health evidence is strong?
- What constitutes sufficient evidence about the impacts of e-cigarettes?
- Should distinctions between different types of e-cigarettes be taken into account when assessing the evidence?
- What do we know about what is working or not working in existing smoking cessation interventions and public health campaigns?
- Are there ethical considerations regarding harm reduction approaches?
- What are the considerations in filling positions on the Academy's expert advisory committee for this project?
- What is the role of science advice in decisions affecting the national economy?

PHOTO CREDITS

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PAGE 3: Parts of an electronic cigarette, public domain.



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INGSA's primary focus is on the place of science in public policy formation, rather than advice on the structure and governance of public science and innovation systems. It operates through:

- Exchanging lessons, evidence and new concepts through conferences, workshops and a website;
- Collaborating with other organisations where there are common or overlapping interests;
- Assisting the development of advisory systems through capacity-building workshops;
- Producing articles and discussion papers based on comparative research into the science and art of scientific advice.

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INGSA has been supported by:

The Wellcome Trust • New Zealand Ministry of Foreign Affairs and Trade • Royal Society London



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