European Smoking Cessation Guidelines and Quality Standards

E-cigarettes

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Wild Tobacco (Nicotiana Rustica)  Cultivated tobacco (Nicotiana Tabacum)
Electronic cigarettes

E-cigarettes are a battery-operated electronic nicotine delivery system (ENDS) designed to provide nicotine through inhalation of nicotine/humectant.

Facts
1. Contain nicotine
2. Habitual addictions which reinforce behavior.
   - “vapor”,
   - hand-to-mouth
3. Chemosensory stimulus
4. Lack of combustion

Why care about e-cigs?

- Miracle or Menace?
- Tobacco Product? Medicine? Electronic Device?
- Potentially Reduced Exposure Products (PREP)
- An emerging market and an evolving device “d-cigarettes”
- Very limited science exists, lots of debate
  - Cessation - Switching
  - Nicotine delivery, topography
  - Constituents
  - Awareness, knowledge
  - Perception of harm/benefit
- Digital world – huge media attention
- Tobacco industry has significantly invested
Smoking cessation among current smokers

• Past year quit attempt \( \text{aOR}=2.08; 95\%\text{CI}: 1.67-2.58. \)

• Any quit attempt (lifetime):
  – 65.7% had attempted to quit cold turkey
  – 22.5% reported use of nicotine replacement therapy,
  – 7.3% reported use of smoking cessation counseling,
  – 7.1% had tried electronic cigarettes.

• However, given that e-cigarettes have only been in the market for a few years, while respondents provided feedback on lifetime quit attempts, it is possible that the prevalence of use of e-cigarettes as harm reduction strategy may even be higher,

• Success? Duration? Relapse? comparative effectiveness?
AVAILABLE EVIDENCE ON OTHER INTERVENTIONS TO SUPPORT TOBACCO CESSATION

Numerous approaches exist to support tobacco cessation with yet unproven effectiveness based on:

- Vaccines
- Silver Acetate
- Nicobrevin
- Lobeline
- Anxiolitics
- Opiod Antagonists
- Mecamylamine
- Gabapentin
- CB1 Receptor Antagonists
- Glucose Tablets
- Non-pharmaceutical interventions
  - Partner-based interventions
  - Financial Incentives
  - Exercise-based Interventions
  - Hypnotherapy
  - Acupuncture, Laser, electro-stimulation
  - Aversive Stimulation

**RECOMMENDATIONS**

- The efficacy of non-conventional therapies, such as hypnosis, acupuncture, phytotherapy, homeotherapy, has not been demonstrated properly and such therapies are not recommended by experts.

- If a patient requests such a non-conventional therapy, the health professional may discourage it, but it is advisable not to prohibit it.

- A combination of conventional and non-conventional medicine is in most cases better than using non-conventional medicine alone.
EFFICACY

- A systematic review by the Cochrane collaboration examined available evidence regarding the efficacy of e-cigarettes in smoking abstinence or smoking reduction
  - Identified a total of 13 trials including 11 cohort studies.
  - Only two published RCTs of e-cigarettes exist, both of which used early electronic cigarette models with low nicotine content, and these studies suffer from several methodological limitations.
- There is an urgent need for clinical trials to determine the efficacy, if any, of e-cigarettes in promoting smoking abstinence.
“Pooled OR of 0.707 (CI 0.538 to 0.928), meaning that, taken together, all the available population studies, taken together, indicate that e-cigarettes depress quitting smoking by about 30%.” Glantz 2015
SAFETY

- **Pisinger and Dossing** reported on a review of 76 studies which reported on health consequences of e-cigarette use. ¹²
  - The authors concluded that due to the relatively few studies and methodological issues of existing studies as well as the inconsistencies and of results among published studies, and the lack of long-term follow-up no firm conclusions can be drawn on the safety of Ecs and also, noted that e-cigarettes should not be considered harmless.

- The lack of reliable studies had led most national authorities to prohibit the promotion of this product as a smoking cessation product.

- European Tobacco Product Directive, Article 20 implementation

- PRECISE project
Risk of e-cigarettes

Risk to smoker
- Dual use
- Toxicity
- Poisoning
- Gateway from e-cigs to cigs
- Experimentation with e-cigarettes

Risk to Never smoker
- Exposure to vapor SHS
- Glamorization of smoking
- Renormalization of smoking
- Circumvent promotion and sponsorship

Risk to ex smoker
- Sustained nicotine addiction
- misconception

Risk to Environment
- Product disposal
- Production waste and transfer

Risk to Policy
- Circumvent tax laws
- Tobacco advertising

Relapse
- Transitioning from abstinence

Adverse effects

Product disposal

Production waste and transfer
RECOMMENDATIONS

✓ There is insufficient evidence to appropriately estimate the health risks associated with use of e-cigarettes

✓ There is insufficient evidence on the efficacy of e-cigarettes as a cessation aid to support their use as a cessation aid

✓ There is no evidence of frequent or severe adverse effects, but there is likewise no evidence of efficacy for smoking cessation, so in view of the absence of studies health professionals should not recommended this product

✓ There is an urgent need for clinical trials to determine the safety and efficacy, if any, of e-cigarettes in promoting smoking abstinence