

6.6 Role in the initiation of smoking (particularly focusing on young people)

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SCHEER acknowledges in this section that most of the included studies were carried out in the USA, and acknowledges that USA data may not reflect the situation in the EU (lines 50-52). SCHEER are comparing apples and oranges, as there are significant differences in e-cigarette use between the US and the EU. The different regulatory systems and variance in product availability render the US data irrelevant in the EU context. USA youth usage data includes use of products not available in the EU: high nicotine pods and cannabis products. Past 30-day use, or experimentation, is the main driver of increased vaping prevalence in the USA, which is less likely to lead to smoking than regular use. European smoking prevalence data is not considered in the report, however, to prove the “gateway effect” in youth, smoking prevalence would need to be shown to have increased.

Data from the CDC found that *“From 2014 to 2018, the percentage of adults aged 18–24 years who currently smoked cigarettes decreased from 16.7% to 7.8%. The percentage of adults in this age group who currently used electronic cigarettes increased from 5.1% to 7.6%”* (Survey and States, 2019). A forensic examination of the National Youth Tobacco Survey by Jarvis et al (2020) found that *“frequent use and signs of e-cigarette dependence remained rare in students who had only ever used e-cigarettes and never any other tobacco product”*. Highlighting once again the falling smoking prevalence among US youth, Levy et al (2019) conclude that *“While trying electronic cigarettes may causally increase smoking among some youth, the aggregate effect at the population level appears to be negligible given the reduction in smoking initiation during the period of vaping’s ascendance.”*. The Opinion acknowledges there was a decline in youth smoking during the same timeframe as there was an increase in youth e-cigarette use in the USA (page 17 lines 30-32).

The EU has a comprehensive regulatory regime for e-cigarettes, the TPD, so it is necessary to examine data from Europe to assess e-cigarette use within Europe. Here are three examples of relevant European studies, with their findings: The German Cancer Research Centre report (DKFZ, 2020) found that: *“Even if numerous studies suggest a connection between e-cigarette consumption and smoking, this has apparently only had little and different effects at the population level”*. A French study by Chyderiotis et al (2020) concluded that *“Among ever-smokers, adolescents who declared having ever used e-cigarettes were less likely than those who did not to transition to daily smoking at 17.”* And, in the UK, Bauld et al (2017) found that *“most e-cigarette experimentation does not turn into regular use, and levels of regular use in young people who have never smoked remain very low”*

Public Health England has cautioned against using gateway terminology: *“We strongly suggest that use of the gateway terminology be abandoned until it is clear how the theory can be tested in this field.”* (McNeill et al., 2015). Population level data from across Europe shows a continual decline in smoking rates across all ages group.

SCHEER concludes that there is strong evidence that e-cigarettes are a gateway to smoking but without examining smoking prevalence data it is not possible to reach this conclusion. Associations between e-cigarette use and smoking are treated as causal in the report when a more realistic explanation might be that both behaviours share a common liability. Chan et al (2020) carried out an extensive systematic review and meta-analyses, examining association between youth e-cigarette use and future smoking. They found that *“the evidence is limited by publication bias, high sample attrition and inadequate adjustment for potential confounders.”*

Lee, Coombs and Afolalu, (2019) summed up the gateway theory with regards to e-cigarette use: *“if a true gateway effect were to exist, it would probably have little effect on smoking prevalence. No*

available evidence exists that increasing e-cigarette use has slowed the decline in smoking prevalence; indeed, the decline appears to have accelerated.”

It is very possible that e-cigarettes are lessening youth initiation of smoking, but the report fails to examine this.

References

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