E-cigarette perceptions in the general population: a systematic review

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Background: As e-cigarette (EC) use rises in the USA and EU among smokers and non-smokers, policy issues are emerging. Several studies have shown how perceptions influence behavior: there have been systematic reviews (SR) on EC, but none on perceptions with recent data on the general population, despite significant growth in the literature since 2016.

Objectives: A SR of studies on EC perceptions in the general population.

Methods: In line with PRISMA 2020, a search was carried out in PubMed and PsycArticle between January 1, 2006, and May 11, 2021, and references in previous reviews were checked. Index terms such as “EC”, “vape”, “perception” and “beliefs” were used to locate articles in English in peer-reviewed journals. Two reviewers screened independently articles on the following criteria: documenting perceptions; general population; conducted in North America or in Europe; not industry-funded. They then extracted data from all the studies. CASP Cohort and NIH cross-sectional study tools were used to assess study quality.

Results: The search yielded 5386 records, 51 were screened for full text and 17 met eligibility criteria. The studies were cross-sectional, ranged from 527 to 32320 participants, and mostly compared perceptions of smokers and non-smokers. CASP and NIH found study quality to be heterogeneous. The results show four aspects of EC perceptions: harmfulness, addiction, health effects, and expected general benefits. On harmfulness and addiction potential, perceptions vary in time and by socio-demographic and smoking status. Perceptions of health effects and general benefits were assessed through different methods, limiting our results.

Conclusion: This SR is the first to focus on perceptions of EC in the general population. It contributes to reflection on the different trajectories of vaping users and provides insights into perceptions of EC among smokers and non-smokers. Finally, it identifies avenues of work for a larger study in France with a new analysis grid on the general population’s perception of EC.

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