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How e-cigarettes compromise children's human rights

Children are now using e-cigarettes at higher rates than adults. Tom Gatehouse and colleagues argue for an approach to regulation that prioritises children's rights

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In January 2024, a headteacher in an English school revealed that an e-cigarette detector alarm in his school toilets was triggered 112 times within a day of installation.[1] A recent survey of over 4000 teachers in England reported children missing lessons to vape, unable to concentrate in class because of nicotine dependence, and children who did not vape being reluctant to use the toilets because of other students vaping in them.[2]

In 2018, the US surgeon general declared e-cigarette use among American youth an "epidemic."[3] The same year, Monitoring the Future (a regular survey of American adolescents) found the surge in vaping to be the largest increase in any adolescent substance use recorded in its 40 year history.[4] Although studies suggest that youth vaping in the US may have fallen since 2019, when more than 25% of high school students reported using e-cigarettes,[5] it remains a serious concern, and greater protection is urgently needed.

Globally, the World Health Organization (WHO) estimates that 7.2% of children aged 13-15 currently use e-cigarettes, based on data from 123 countries.[6] While most e-cigarette users live in high income countries, there are indications that use is increasing among children and young people regardless of country income. A 2023 study found that five out of six low and middle income countries reported substantial increases in youth e-cigarette use from 2012 to 2020,[7] while a systematic review the following year found that youth e-cigarette use was increasing globally, particularly among boys.[8] Global data indicate that the prevalence of e-cigarette use in children aged 13-15 is nine times that of adults.[6]

As their brains are still developing, adolescents are particularly sensitive to nicotine exposure, which may have long term effects on attention, cognition, memory, and mood.[9] They are also more susceptible to nicotine addiction,[9] an adverse outcome in itself,[10] which can lead to problems with addiction and substance abuse later in life.[9]

Evidence is also growing that e-cigarettes may act as a gateway to tobacco smoking. A 2025 umbrella review found that youth who had used e-cigarettes are around three times as likely to go on to smoke cigarettes. While the presence of other variables makes inferring direct causality challenging, the study found a significant association between e-cigarette use and later cigarette smoking in young people.[11]

In 2023, noting the "alarming increase in the use of e-cigarettes among children and young people," and disproportionate use in children aged 13-15, WHO called for urgent action.[12] Such action is not only crucial from a public health perspective but is required by international human rights law. Appropriate regulation involves weighing potential benefits to a group of adults against well established harms to children, and the most relevant legal and ethical framework for doing this is the UN Convention on the Rights of the Child (CRC).

Children's health in international law

The CRC, which was adopted in 1989, is the most widely ratified human rights treaty in history. All UN members except the US are parties, meaning they are legally bound to protect and uphold the fundamental rights of every child. The two CRC rights of most relevance for tobacco control are the right to health (article 24) and a general norm known as the best interest of the child principle (article 3).[13]

Article 24 states: "Parties recognize the right of the child to the enjoyment of the highest attainable standard of health."[14] This means that countries must seek both to enable children to fulfil this right and to protect them from forces which may prevent them from doing so, including harmful industries like tobacco.[15]

Indeed, an explicit link between tobacco control and children's rights was established in 2003 with adoption of the WHO Framework Convention on Tobacco Control, which cites CRC article 24 in its preamble.[16] This is relevant to youth use of e-cigarettes as well as conventional tobacco products, since the WHO framework obliges countries to prevent and reduce both tobacco consumption and nicotine addiction (article 5.2b).[16]

This link between the WHO tobacco framework and children's rights was reinforced in 2013, when the Committee on the Rights of the Child encouraged parties to the treaty to ratify the framework.[17] The committee also recommended that parties protect children from unhealthy food and drink, alcohol, solvents, illicit drugs, and "other toxic substances,"[17] calling for "Regulation of the advertising and sale of substances harmful to children's health and of the promotion of such items in places where children congregate, as well as in media channels and publications that are accessed by children."[17] This should obviously include e-cigarettes.

Article 3 of the CRC states that "the best interests of the child shall be a primary consideration" in any actions concerning children, including policy making.[14] This is one of four general principles underpinning the treaty and an important mechanism that protects children in public law.[18] This best interest principle has informed best practice in

tobacco control, with evidence showing benefits of such policies for children.[13]

With nine out of 10 adults who smoke having first tried smoking before the age of 18, young people have long been a key market for the tobacco industry, and internal documents show how the industry has deliberately targeted them. As stated in a memo by tobacco multinational Philip Morris in 1981, "Today's teenager is tomorrow's potential regular customer."[19]

Many successful tobacco control policies have therefore focused on reducing the appeal, availability, and affordability of tobacco products to children and adolescents. The result has been fewer young people taking up smoking, which has become an increasing driver of falling smoking prevalence.[20] In England, for example, current smoking among children under 16 was 19% in 2000, remaining unchanged since 1982. But after ratification of the WHO framework and a period of much improved tobacco control, this figure had fallen to 5% by 2018.[21] However, many countries have failed to uphold this best interest principle when regulating e-cigarettes.

Misappropriating harm reduction

Harm reduction, a concept first used regarding illicit drugs, refers to interventions aiming to reduce drug related harm, including needle exchanges and overdose reversal kits. Such measures provide important individual and public health benefits, including containing the spread of transmissible diseases such as HIV and hepatitis C, preventing overdose related deaths, and reducing healthcare costs.

The WHO framework defines tobacco control as "a range of supply, demand, and harm reduction strategies."[16] Smoke-free spaces, for example, aim primarily to reduce harm by limiting public exposure to tobacco smoke, though they also promote smoking cessation and reduce demand for tobacco products.

In recent years, harm reduction has been hijacked by the tobacco and nicotine industries. They have deliberately narrowed understanding of the concept,[22] focusing exclusively on people who smoke switching from cigarettes to other nicotine products while downplaying other evidence based interventions that reduce tobacco related harm. They argue that regulation of e-cigarettes in the same way as conventional tobacco products will prevent people who smoke switching to safer alternatives. However, e-cigarettes have not been established as safe and effective cessation aids,[23] and a substantial proportion of people who start using e-cigarettes continue to smoke, becoming "dual users."[10 24]

Any potential benefit of e-cigarette use applies primarily to people who smoke—a minority of the population—and who switch completely and promptly to e-cigarettes.[10] The potential to increase cessation among this group should not be misconstrued as reducing harm for the population as a whole, and it does not justify making harmful and highly addictive products widely available to larger populations of mostly non-smokers, including children.[25 26]

No country has approved e-cigarettes as cessation products, but if they are intended for smoking cessation, access should be limited to adults who smoke, particularly those who have failed to quit using approved methods.

Inverted priorities

Article 3 of the CRC is clear that children's best interests should be a "primary consideration"—not negotiable for potential benefit to some adults who smoke. Multiple countries can thus be considered in violation of the treaty. Factors such as government inaction and regulatory failure (62 countries still have no e-cigarette regulation),[27] as well as corporate interference, have led to widespread availability of e-cigarettes with ineffective protection for children, resulting in prevalences of use that are higher than among adults.[6]

Misappropriation of harm reduction has also enabled the tobacco and nicotine industries to claim a public health role.[28] But e-cigarette marketing and product design heavily imply that adults who smoke are not their principal target. In the US, for example, the e-cigarette maker Juul has faced multiple lawsuits over its marketing to children, leading to settlements costing the company billions of dollars.[29]

Most children and adolescents who use e-cigarettes have never smoked at the point they initiate use. For this group, the correct baseline with which to compare the effects of e-cigarette use is not tobacco smoking but breathing air.[25] Applying this comparison, e-cigarettes are demonstrably harmful,[15] with strong or moderate evidence of use among youths conferring increased risks of addiction, burns and injuries, anxiety, mood disorders, cough, throat irritation, asthma, and adverse cardiovascular measures.[9-11 30]

Our priorities have been inverted: by stressing potential benefit to people who smoke—a small, albeit important, subsection of the population—the tobacco and nicotine industries have successfully influenced governments to downplay potential harms to a much larger group, which includes children.

Focusing on children's best interests

The CRC has helped shape policies affecting the health of children, with ratification associated with improvements in child vaccination and mortality.[31] However, challenges with implementation persist, and governments have often fallen short of CRC requirements regarding alcohol and unhealthy food, for example.

Nonetheless, there may be greater potential to leverage the treaty in this case, given the WHO tobacco framework's success in protecting children from tobacco related harm. Together, these two global treaties provide the basis for a child centric approach that puts children's best interests first and protects them from the harms associated with nicotine consumption in all its forms. Furthermore, e-cigarettes are relatively recent and less entrenched than many other products.

Measures consistent with the CRC may vary according to national laws and public health objectives as well as countries' capacity to legislate and enforce.[32] WHO recommends implementing many of the same measures that have helped reduce youth smoking rates worldwide.[12] Where commercial sales are permitted, core policies could include strictly enforced age restrictions; restrictions on e-cigarette advertising, promotion and sponsorship; retail display bans; plain packaging; and bans or restrictions on flavours.[12]

Countries should also consider tighter controls on the retail environment. Studies suggest that tobacco sales could be reduced by measures such as a cap on the number of tobacco retailers by population density, a minimum distance between retailers, and tobacco-free zones around schools and other areas where children congregate.[33] Such measures may also be effective for e-cigarettes.

Governments will need to be mindful of practical barriers to enforcement, such as social media marketing and transborder e-commerce. Pre-empting such challenges will ensure that a child centric approach to e-cigarette regulation has the greatest chance of success. The overarching goal should be to reduce the appeal, availability, and affordability of e-cigarettes to children, as many countries have already done for tobacco.

E-cigarettes are known to be harmful for those who do not smoke, particularly for children, regardless of any potential role in smoking cessation, or conversely, potential gateway effects. Governments are therefore legally bound to prevent their use among this demographic under the CRC and the WHO framework convention.[15]

The long term effects of e-cigarette use are still uncertain,[23] but harms established in children and young people today will have future consequences. Such consequences will affect not only them as individuals, but also their families, their communities, and wider populations. The failure to protect children's right to health today could result in harms which span generations.[25 34]

Key messages

- Globally, children are now using e-cigarettes at higher rates than adults, largely because of the nicotine industry targeting youth
- Evidence indicates that most of this demographic had never smoked when they tried e-cigarettes
- Governments often overlook the harms to children, influenced by industry claims around reducing harm to adults who smoke
- International legal frameworks, including the WHO Framework Convention on Tobacco Control and the UN Convention on the Rights of the Child, can provide a legal basis for e-cigarette regulation which puts children's health first

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