COMMENTARY

E-cigarettes: harm reduction or rehabilitation of the tobacco industry?

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Introduction

In recent years, there has been a marked increase in e-cigarettes popularity among young people. Data from adolescents in the USA show that e-cigarettes have become the number one tobacco product used by this population, with past-month use among high school students reaching 27.5% in 2019 (FDA 2019). While still investigated, the recent epidemic of acute lung injuries and fatalities associated with e-cigarette use underscores the importance of identifying e-cigarette-associated risks and enacting policies to protect young people. In 2014, an IJPH editorial posed the fundamental question "To e-smoke or not to e-smoke," showcasing some of the key pros and cons of e-cigarettes and highlighting the limitations of evidence needed to settle this debate (Kuenzli 2014). A lot of evidence has appeared since, yet the debate is still stuck on that original question.

I argue in this piece that one of the main reasons for this stalemate is how this debate has been diverted from the reality of an industry-driven marketing of addictive products to a debate about (1) tobacco harm reduction (THR); (2) e-cigarette industry versus tobacco industry (TI); and (3) ways to deal with the "unintended" e-cigarette rise among youth. In this commentary, I will touch upon the fallacy of these diversion arguments.

Harm reduction with e-cigarettes; we get it

Efforts by e-cigarette proponents have been focused on explaining to the rest of us what does not need explanation—the nature of harm reduction, and how valid it is for e-cigarettes (Abrams et al. 2018). This usually revolves about reminding everybody that smokers smoke for the nicotine while combustion causes most of the harm, so if we can dissociate the two, as e-cigarettes claim to do, we have a clear winner. The classical analogy provided here is needle-exchange programs, which is a poor fit for e-cigarettes because clean needles have a negligible role in substance use initiation and maintenance and have no vested interests behind them (Maziak 2014). Still, there is a general acceptance of e-cigarettes' harm reduction potential to individual smokers.

It gets murky when we move to the population level, given that most of the new e-cigarette users in the USA for example are young people, and increasingly never-smokers. Needless to say that such dramatic e-cigarette uptake by youth nationwide is not occurring by chance, but through targeted marketing, with the use of flavors, celebrities, cool designs, and social media (Grana et al. 2014). Therefore, it is not those who caution about e-cigarettes that need to be persuaded about THR and nicotine, but the e-cigarettes industry, which while enjoying the free promotion of their products by members of the tobacco control community, does not abide by any harm reduction principle.

Good industry/bad industry

To be fair, the potential harm of e-cigarettes is well recognized by both sides of the debate, yet e-cigarettes advocates usually benchmark it against the legally sold more lethal product, cigarettes (Glantz and Bareham 2018). So, in a world where "bad" combustible cigarettes reign, e-cigarettes become a "good" development, with the hope that they will outcompete the "bad" cigarette industry and drive it out of business. The reality however, taking the market leader Juul as an example is different. To begin with, the dramatic rise in Juul use among young people in the USA was a direct result of Juul's marketing tactics (Jackler and Ramamurthi 2019). Once Juul became very successful among youth, they allowed Philip Morris International (PMI) to acquire 35% of their shares, making

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it harder to distinguish the new, allegedly benign e-cigarette industry from the infamous TI. Commenting on PMI's acquisition, a Juul executive said "we've got the biggest manufacturer of cigarettes in America to hasten their own decline." While it will be interesting to see how investors will stomach this statement at PMI's next shareholders' meeting, the final nail in this view's coffin was delivered by a former tobacco executive becoming Juul CEO in Sep. 2019.

Generally, once the TI realized the money-making potential of e-cigarettes, they started producing their own (e.g., PMI IQOS). These shifts toward e-cigarettes were not accompanied by abandoning or phasing out their traditional cigarettes, but by expanding the market for traditional cigarettes worldwide through a combination of lobbying and corrupting practices (Gilmore et al. 2019).
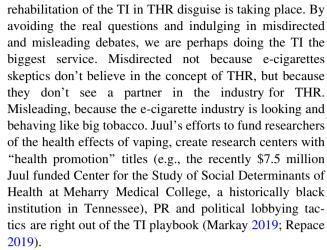
Solutions from a parallel reality

To deal with the reality of e-cigarette increase among adolescents but not their "intended" adult smokers, e-cigarettes proponents offer some solutions. These mostly focus on policy and regulatory approaches that somehow should encourage adult smokers to use e-cigarettes while doing the opposite for youth, and with surgical precision (Maziak 2014). I am not sure how these are supposed to work when we live in the same society and what is promoted for one group influences others directly and indirectly. Moreover, a lot of marketing of e-cigarettes is user-generated on social media that is outside of policy and regulatory domains for the most part. Eventually, the e-cigarette using adult is a potent promotional item and normalizer of the behavior for others.

For argument's sake, let's assume that in the magical world of e-cigarette THR, we were able to enact such policies. So, in this scenario, with minimal uptake among young nonsmokers, a declining consumer base is inevitable, with adult smokers either quitting via e-cigarettes, or on their own, or just dying off (Maziak 2014). This declining demand model can never be a business model for the industry, yet e-cigarettes advocates believe that somehow you will have a responsible industry that will just "kill itself."

We need to refocus the debate

What is happening here is the TI realizing the benefits of diversifying nicotine products that appeal to different sectors of society, as a way to expand the base of nicotine-addicted customers who increasingly are using multiple products. Rather than confronting these old-new tactics, a rehabilitation of the TI in THR disguise is taking place. By avoiding the real questions and indulging in misdirected and misleading debates, we are perhaps doing the TI the biggest service. Misdirected not because e-cigarettes skeptics don't believe in the concept of THR, but because they don't see a partner in the industry for THR. Misleading, because the e-cigarette industry is looking and behaving like big tobacco. Juul's efforts to fund researchers of the health effects of vaping, create research centers with "health promotion" titles (e.g., the recently $7.5 million Juul funded Center for the Study of Social Determinants of Health at Meharry Medical College, a historically black institution in Tennessee), PR and political lobbying tactics are right out of the TI playbook (Markay 2019; Repace 2019).

There is an innate mismatch between the goals of public health and those of industries that sell harmful and addictive products. Allowing this natural e-cigarette experiment on our most vulnerable and voiceless population—children—even with the best intentions for adults is not grounded in any public health or ethical values, even the most pragmatic ones. In the absence of clear, short and long-term safety, and efficacy data, e-cigarettes should be regulated with one main objective, protecting youth from nicotine addiction and harm.

Compliance with ethical standards

Conflict of interest The author has no relevant affiliations or financial involvement with any organization or entity with a financial interest in or financial conflict with the subject material or materials discussed in the manuscript. This includes employment, consultancies, honoraria, stock ownership or options, expert testimony, grants or patents received or pending, or royalties.

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