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Short Communication

Vape shop location and marketing in the context of the Food and Drug Administration regulation

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ABSTRACT

Objectives: A range of electronic nicotine delivery systems (ENDSs; e.g. e-cigarettes, e-hookahs) have emerged in the US market, with rapid increases in use. While ENDSs may facilitate harm reduction in smokers, they may represent risks to health and addiction in the nicotine naïve. Vape shops account for a substantial proportion of ENDS sales/distribution.

Study design: Brief summary of the relevant literature.

Methods: This communication provides a brief summary of relevant literature derived from traditional tobacco retail and point-of-sale marketing and synthesizes issues regarding how the Food and Drug Administration regulation might impact the ENDS market, specifically the vape shop industry, a nuanced tobacco retail environment.

Results: This literature indicates that tobacco retailers are disproportionately located near vulnerable populations (e.g. the socio-economically disadvantaged, racial/ethnic minorities, and young adults) and may use stronger promotional activities to target these populations. Research extending this literature to ENDSs and ENDS retailers, such as vape shops, is limited. Regulatory efforts, spatial access, and exposure to marketing and advertising are macrolevel factors that have a significant impact on the individual-level tobacco use.

Conclusions: Future research should examine multilevel factors (e.g. policies, community context, and marketing) and extend this literature to the ENDS market, particularly vape shops, which is especially relevant during the rapidly changing regulatory environment.

Introduction

Electronic nicotine delivery systems (ENDS; e.g. e-cigarettes) have emerged in the US market, with increased use and product diversity. First-generation ENDSs (cigalikes) simulated smoking regular tobacco cigarettes. Second- and third-generation modified ENDSs are more technologically advanced, with atomizers to improve nicotine dispersal, housing high-capacity batteries, and accommodating various e-liquids sold separately from the device.[1]

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ENDSs may facilitate harm reduction in smokers by assisting in cessation or reducing exposures to toxins and nitrosamines.[2] However, ENDSs represent health risks. For example, ENDS e-liquids may contain detectable levels of carcinogens and toxins, and the ENDS use involves pulmonary health risks and may lead to nicotine addiction in the nicotine naïve (e.g. youth).[1]

Impending the Food and Drug Administration regulation

The Food and Drug Administration (FDA) finalized a rule to regulate all tobacco products.[1] Prior to FDA Deeming Regulation, state and local jurisdictions regulated ENDS, primarily by enacting minimum legal age requirements and including vaping in smoke-free policies. Salient components of the FDA Deeming Regulation have been or will go into effect from 2016 to 2022 and include: 1) minimum sales age of 18 years, mandatory age verification at retailers, and prohibiting free samples, vending machine sales, and false/misleading ads; 2) disclosure of ingredients; 3) registration of manufacturers; 4) applications for premarket review of tobacco products seeking a substantial equivalence exemption marketing order and prohibiting the use of "light," "mild," etc.; 5) premarket review of tobacco products seeking a substantial equivalence marketing order; 6) required warning labels; and 7) premarket review of tobacco products seeking a premarket tobacco application and disclosure of harmful and potentially harmful constituents. This shift in the regulatory landscape presents a critical period for examining regulatory impact on ENDS retailers.

Vape shop proliferation

Vape shops (stores exclusively devoted to ENDS sales, as per the FDA[1]) have proliferated in the US, with estimates ranging up to 35,000 shops in all 50 states.[3] Estimates regarding the proportion of ENDSs distributed via vape shops in the US are difficult to obtain as most domestic reports focus on major ENDS companies and brands (rather than the types of more nuanced products sold in vape shops), thus overestimating ENDS distribution via convenience stores and other mainstream channels. However, even these estimates indicate that vape shops account for roughly 20% of ENDS sales, with convenience stores and online sales accounting for about 25–30%.[3] This highlights how a small number of vape shops (relative to convenience stores) control a relatively large proportion of ENDS sales and distribution.

Vape shop marketing

Public health policies must be informed by data regarding the current vape shop marketing strategies—how and where they display their products or, in the case of specialty shops, their stores (placement), what strategies are used to promote their products, the types of products they sell (e.g. types of vaporizers and e-liquids), and pricing strategies, among others.[4] Marketing data are important for understanding an industry's target market and strategies for shaping perceptions of their products and their use. Compared with convenience stores, which typically sell 'cigalikes' manufactured by tobacco companies, vape shops sell a wider selection of almost exclusively second- and third-generation ENDSs;[5] feature a large variety of accessories and e-liquid flavors;[5] and promote the ability to experiment and socialize in the context of tasting bars.[5]

Methods

This short communication provides a brief summary of relevant literature derived from traditional tobacco retail and point-of-sale (POS) marketing and synthesizes issues regarding how the FDA regulations of ENDSs might impact the ENDS market, specifically the vape shop industry, a nuanced tobacco retail environment.

Results

First, given the emergence of vape shops and their increasing share of ENDS sales volume, it is important to understand where they are located and their target markets. Prior research has indicated that spatial access to tobacco retailers and POS marketing may reflect target markets and that physical availability of retailers increase the exposure to environmental cues that promote use.[4,6] However, limited published research has examined where vape shops are located or the impact of spatial access to vape shops or exposure to POS marketing on ENDS uptake or smoking cessation.[7,8] Consistent with literature regarding the impact of exposure to tobacco retailers and POS marketing,[4,6] recent research has found that adolescent use of ENDSs is related to greater exposure to ENDS retailers and advertising.[7] However, whereas traditional tobacco retailers have concentrated on vulnerable neighborhoods (e.g. low income and minority),[4,6] a study in New Jersey showed that census tracts with higher proportions of blacks had lower odds of having a vape shop.[8]

Second, the FDA regulation may limit the vape shop industry growth or increase vape shop closures. Most vape shops are small businesses—nearly half have less than 10 employees, and over two-thirds are single-store owners.[9] Moreover, 60% of vape shop revenues come from e-liquids;[9] this important part of the vape shop industry draws many vape shops to also be e-liquid manufacturers, thus subjecting them to greater FDA regulation. These businesses may not be as resilient to regulation rollout and lack the capacity to seek market approval to sell their own e-liquids. Furthermore, state and local tobacco control policies (e.g. excise taxation) may impact vape shops as states more progressive in tobacco control may be quicker to implement policies that impact the industry.

Third, limited research has examined vape shop marketing (e.g. attributes of vape shops and their products). Few published studies have performed POS assessments of vape shops.[10] This line of inquiry is important as research regarding traditional tobacco retailers has indicated that neighborhood characteristics impact marketing and POS practices. For example, price promotions have been shown to be more prevalent in neighborhoods with a higher proportion of young adults, minorities, and lower income groups,[4,6] yet this has not been examined among vape shops.

Finally, the FDA regulation will change the vape shop experience. For example, age verification will be required. The 2015 Vape Shop Index indicated that 15% of vape shops had no signage to prevent underage sales, 46% allowed minors to enter, and 8% did not require identification at POS.[9] Another major change is that free samples of e-liquids will not be allowed (although non-nicotine containing e-liquids are still in question); this change may be detrimental to the vape shop experience, given the importance of the social experience of tasting bars.[5] Finally, health warning labels will be required on products and promotions. While signage is an important promotional strategy, limited research has documented the impact of warning labels on ENDS products or ads, particularly relevant, given that ENDSs have been promoted as safe and for smoking cessation or harm reduction.[1]

Discussion

This prior research sets the foundation for future research, addressing several key gaps and opportunities. Research must examine the impact of the FDA regulation on vape shop location, marketing, and POS practices as findings could mark dramatic changes in ENDS products, education about products, and the ENDS consumer base (e.g. smokers vs. youth).

First, it is critical to understand who the target markets of vape shops are by examining where they are located and their POS marketing strategies. This is particularly important, given the potential population impact of ENDS in terms of harm reduction benefits if cigarette smokers switch to ENDSs[2] and the potential of ENDS uptake by youth populations.[1]

Second, innovative methods are needed to collect data that traditional POS assessments may not be able to obtain (e.g. age verification practices, types of messages vape shop staff may deliver regarding ENDSs). Mystery shopper approaches have been used to examine age verification practices of tobacco and alcohol retailers. This type of approach has not yet been applied to vape shops. Moreover, the types of messaging used to promote ENDSs (e.g. harm reduction or cessation; social experience) may be deceptive or target young people but would be missed by traditional POS measures. Such messages have policy implications as they undermine tobacco control efforts and efforts toward denormalization of tobacco use.

Finally, marketing and POS practices of vape shops must be contextualized in terms of neighborhood characteristics or across contexts with differing tobacco control policies, which is critical to informing policy. Given that price promotions have been shown to be more prevalent in neighborhoods with a higher proportion of young adults, minorities, and lower income groups,[6] obtaining these important policy-relevant data in relation to vape shop marketing is critical to informing policies and enforcement of policies.

Conclusions

The shift in the regulatory landscape presents a critical period for examining the regulatory impact on multiple socio-ecological levels, from the macrolevel (e.g. economic impact on the vape shop industry) to microlevel (e.g. ENDS use in high-risk populations). Thus, research is needed to examine where ENDS retailers are located, as well as their marketing and POS practices, particularly among vape shops which are unique in many ways. It is especially important to study these phenomena in relation to ENDS use among high-risk populations, such as youth and young adults. Indeed, the FDA regulation of ENDSs may uniquely impact vape shops as distributors and young adults as consumers. Collectively, multilevel research will provide an evidence base to inform efforts to enforce current regulations and to develop and refine regulatory efforts over time.

Author statements

Ethical approval

The institutional review board approvals were not required for this manuscript as no human beings were involved in this manuscript.

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Competing interests

The author declares no conflicts of interests.

Author contribution

Dr. Berg conceptualized and wrote this commentary.

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