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A CONTENT ANALYSIS OF THE MOST POPULAR VAPING BLOGS

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Presenter Disclosures

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No relationships to disclose

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Background - Vaping

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- The Surgeon General declared vaping an epidemic among youth (CDC, 2018).

- In 2019, a nationwide outbreak of vaping product use-associated lung injury (EVALI) occurred.

- Evidence suggest that those whose lungs may be compromised from vaping may also be at increased risk for COVID-19 complications (Volkow, 2020).

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Background - Information seeking

- Many Americans seek health information online (Fox & Duggan, 2013), with a 450% increase in Google searches for e-cigarette related terms between 2010 and 2015 (Ayers et al., 2016).

- Major tobacco companies use social media to promote vaping as a harm reduction products (Truth Initiative, 2019).

- Greater exposure to persuasive narratives or advertisements about vaping on social media has been shown to influence vaping attitudes and intentions including initiation of vaping (Mantey et al., 2019; Pu & Zhang, 2017; Timberlake, 2016).

- Internet users perceive health content shared in online platforms as reliable because it is grounded in direct experience (Schaffer, Kuczynski, & Skinner, 2008).

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Purpose

- There is a paucity of research examining vaping blogs and their role in propagating information.

- Observing social media, blogs, and forums may lead to better understanding of phenomena that traditional survey instruments cannot.

- The purpose of this study was to develop the better understanding of information that readers of vaping blogs are exposed to.

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Methods

- The 25 most popular vaping blogs were identified using the Feedspot website, which rates blogs by relevance, post frequency, follower counts and engagement, content area, age of blog, and Alexa web traffic rank.

- Blogs were deemed eligible if: (1) the blog had posts in the last 6 months, and (2) the blog focused on communicating vaping information to the general adult population.

- The blogs included in this study were ranked most popular as of 9/15/2019 and were analyzed over a three-month period (September – November 2019).

- From each site we analyzed the last 5 blogs/posts. Blogs were analyzed using content analysis approach (Krippendorff, 2010).

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Results

- Geographic origin of blogs: United States (n=15), the U.K (n=6), Australia (n=1), Malaysia (n=1), unable to determine (n=2).

- Blogs present themselves as support mechanism for those who are considering vaping or are already engaged in vaping.

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Results, Content Themes

- **Addictiveness of Nicotine**
  - 1/3 of blogs displays the warning of nicotine addictiveness.
  - Some blogs disputed the nicotine addictiveness, i.e., "*Challenging the lies about nicotine addiction*".

- **Warning to minors**
  - Most blogs state that they are not interested in advertising or selling their products to minors.
  - One blog offers the guide to help parents spot the subtle indicators that their child may be using e-cigarettes.
  - However, only six sites require age verification upon entry to the website.

- **Discounts and advertising of vaping products**
  - Advertisements for vape mods, e-juices, or online vape shops were omnipresent.
  - Presence of discount codes and coupons, which can be used at online shops, was ubiquitous

- **Review of vaping products**
  - Reviews of mods, disposable vapes, and e-juices.
  - Reviews of various cannabidiol (CBD) products such as tinctures, cream, vaping oils and disposable CBD sticks.
  - These reviews take both written and video form.

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Results, Content Themes

- **Promotion of vaping products as an alternative to combustible tobacco**
  - Vaping products as a healthier alternative to combustible tobacco.
  - Using health authorities to substantiate these claims.
  - Personal stories were prominently featured, framed as ""the road to zero" to getting rid of nicotine addiction.
  - Assertions that vaping is rebellious, or more appealing to hipster culture (i.e., "*when something exists outside the status quo and succeeds there, it sets up its own counterculture – and once it does that, it starts to gain a reputation").*
  - Vaping products are also seen as more convenient, less boring than cigarettes, less annoying*,* or even a solution for secondhand smoking (i.e., "*e-cigarette emits aerosol meaning there is no harmful gas being emitted into the atmosphere").*

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Results, Content Themes

- **News stories**
  - State and federal bans of flavored e-liquids.
    - Bans are detrimental to vaping businesses, hence strong opposition.
    - "Flavored vape fallacy"
    - Vaping has potential to "benefit" public health, by reducing harm among those who already use nicotine

  - A nationwide outbreak of vaping product use-associated lung injury (EVALI).
    - Blogs connect EVALI to THC vaping products, specifically those sold on the black market.
    - Emphasized that the THC cartridge users do not refer to their products as e-cigarettes and warns that authorities and press referring to these devices as e-cigarettes may be doing disservice as those users may remain unaware of the danger.
    - Asserted that people are buying THC vape pens due to criminalization of marijuana use.

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Discussion

- Easy for minors to access blogs, although the majority of blogs are not selling vaping products directly.

- Those who sell, employ age verification process for purchases.
  - It remains unclear whether minors can circumvent age verification processes.

- Blogs emphasize uniqueness of vaping, creating subculture that is "rebellious", and "anti-big tobacco".
  - These tactics are used to link vaping products with positive associations and can increase likelihood of vaping.

- Blogs promote vaping as "road to zero" - transition to a "nicotine free life".
  - Yet, the most adult e-cigarette users do not stop smoking combustible tobacco and are instead continuing to use both products (Creamer et al., 2019).
  - Public health advocates should balance messages of the potential benefits of switching from combustible tobacco to vaping against the possibility of dual use.

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Discussion

- Blogs opposed vaping bans on the grounds that adults are the ones who prefer flavored products.
  - Previous studies show that, among youth, flavored products enhance appeal and intentions to use, more than advertisements for non-flavored products (Vasiljevic et al., 2016).

- Blog posts reflected on the association of THC cartridges to EVALI outbreak.
  - Many blogs relayed the Food and Drug Administration (FDA) warning to consumers to stop using vaping products containing THC.

- The blogs are interested to build a reputation as reliable and trustworthy sources of information on vaping.
  - Prudent to form partnerships with some of reputable sites?
  - By partnering with these blogs, health advocates may have an opportunity not only to provide reliable and correct information to users, but also to influence hard-to reach populations who may be more likely to respond to trusted blogs rather than to the public health establishment.

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Limitations

- Current study represents a snapshot in time.
  - Because of the fluid and changeable nature of the "blogosphere" content on vaping blogs is likely being modified often.

- We focused exclusively on English-language blogs, future studies should also include blogs written in other languages.

- We focused solely on information presented on the Internet blogs.
  - Many users may obtain information about vaping products from other media outlets, in vape shops, or via their personal networks.

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Conclusions

- Findings highlight common features of prominent blogs for vaping.

- Given the popularity of vaping, this investigation informs the public health community of information present on these blogs.

- Some vaping blogs are misleading and misinforming the public. These narratives need to be countered with evidence-based information about vaping.

- Given the potential influence of vaping blogs on consumers, it could be prudent to form partnerships with the most popular blogs. This may help to present factually correct and evidence-based vaping-related information to the public.

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