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Letter

Public Health Concerns and Unsubstantiated Claims at the Intersection of Vaping and COVID-19

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COVID-19 has changed the way people are living across the globe but will affect the health of specific populations more than others. Initial evidence suggests that older adults and individuals with preexisting medical conditions are more likely to develop problems with the virus.[1] Those with preexisting chronic respiratory conditions are an extremely vulnerable group,[2] and may include individuals who engage in behaviors (eg, smoking and vaping) that affect respiratory health.[1,3]

During our systematic surveillance of vaping-related conversations on Twitter, we identified topics of conversations at the intersection of the ongoing COVID-19 pandemic and vaping. Two of these topics are particularly relevant to public health and include health concerns and unsubstantiated health claims.

Health Concerns

One of the key concerns revolved around elevated health risks associated with COVID-19 among those that vape. For example, specific questions raised pertained to whether individuals who vape at higher risk to COVID-19 infections, and whether vaping, linked to lung inflammation, makes individuals more susceptible to COVID-19 infections. Similarly, concerns pertained to the possible priority measures for vaping individuals. For example, additional questions included whether individuals who vape be prioritized in COVID-19 testing, and whether individuals should stop vaping during the COVID-19 as a preventive measure.

Other concerns revolved around the dangers of spreading COVID-19 through the sharing of vaping devices. Example concerns alluded to elevated risk of COVID-19 infections due to sharing of vape devices, and due to passive exposure to vapor clouds. Additionally, we found discussions about the similarity of symptoms shared by both EVALI (E-cigarette, or Vaping, Product Use-Associated Lung Injury) and COVID-19. Some posts mentioned the similarity in computerized tomography scans between EVALI symptoms and COVID-19, while raising questions such as, "Were early COVID-19 cases misinterpreted as EVALI cases during the vaping illness outbreak?," and "Was vaping used as a cover-up for early COVID-19 cases?." These pressing public concerns expressed on social media warrant attention in health communication campaigns and clinical care settings.

Unsubstantiated Health Claims

Unsubstantiated health claims pertained to specific vape device mechanisms that were alleged to protect individuals from the COVID-19 virus. For example, posts emphasized that vape devices would increase humidity in the lungs and thereby prevent COVID-19 infections. Some posts suggested that vape devices might offer promise for administering COVID-19 medication to the lungs and highlighted that these devices could act as delivery vehicles of organic oregano oil, a substance alleged to destroy the virus. In a few cases there were unsubstantiated health claims about PG's (poly-glycerin) role in possibly being able to destroy harmful COVID-19 airborne contagions. To date, there is no evidence substantiating vaping as a potential protective factor against COVID-19.

Evidence So Far

There is limited evidence about the implications of vaping and COVID-19 outcomes. A recent statement from the NIH called for surveillance of associations between COVID-19 case severity and substance use, smoking or vaping history, and smoking- or vaping-related lung disease.[1] Experts in tobacco control and media reports have highlighted that smokers (including those who vape) are more vulnerable to COVID-19 infections or more likely to develop serious complications if they contract a COVID-19 infection.[4–6] More scientific evidence is needed to substantiate these potential adverse health outcomes.

In terms of the implications of sharing devices and vaping in groups or confined spaces, recent studies found that the coronavirus associated with COVID-19, remains stable for several hours to days in aerosols and on surfaces,[7,8] which makes it plausible for the virus to be transmitted from surfaces such as vaping devices.

Action Required

Continued surveillance (of all forms of data including Twitter) and monitoring of public discourse at the intersection of COVID-19 and vaping-related health outcomes can offer early insights for timely health interventions targeting unsubstantiated health claims and informing clinical care. Clinicians should reinforce the concept of physical distancing and recommend that this includes refraining from sharing vaping device, juices, and other corresponding parts. Epidemiological studies of cohorts of COVID-19 patients can establish associations between vaping and COVID-19 infections. Analysis of electronic health records of COVID-19 patients can also be valuable resources in identifying the nature and trajectory of symptoms associated with vaping-related pulmonary infections among vaping individuals who tested positive for COVID-19.

Supplementary Material

A Contributorship Form detailing each author's specific involvement with this content, as well as any supplementary data, are available online at https://academic.oup.com/ntr.

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Declaration of Interests

None declared.

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