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#### **Brief Report:**

#### Cannabis dispensary online marketing practices in response to COVID-19 lockdowns

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**Related file:** Examples of images and screen shots of the COVID announcements may be viewed at the University of California eScholarship website [provide link]

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#### Abstract

Background: The COVID-19 pandemic has been accompanied by increases in cannabis consumption, which might relate to dispensary marketing activities. As part of an ongoing project monitoring cannabis dispensary websites in Northern California and Reno, Nevada, we noticed many websites added announcements and "pop-up" communications in response to lockdowns. This brief report describes the cannabis dispensary website communications related to COVID-19 with the aim to provide insight into emerging marketing messages that may increase cannabis consumption in times of crisis.

Methods: Content analysis of COVID-19 announcements present on cannabis dispensary websites in San Francisco/Alameda counties (n=32), and the Reno area (n=15) in April-May 2020 shortly after lockdowns were implemented.

Results: COVID-19 announcements were present on 25/32 (78%) of dispensary websites in San Francisco/Alameda and 9/15 (60%) of websites in the Reno area. Almost all COVID-19 announcements (88% San Francisco/Alameda, 89% Reno) announced operational changes such as delivery or curbside pickup services, 72% and 56% respectively announced patron/employee safety measures. Health related messages were present; about half of website announcements referred to government/health authorities, 44% of Reno area announcements used healthcare rhetoric, and some San Francisco/Alameda announcements included suggestions for using cannabis to mitigate infection risk or manage anxiety.

Conclusions: Most cannabis dispensaries in the study region implemented COVID-19 pandemic operational changes to maintain product availability, and many positioned their identity with health – either by referring to health authorities, or using health rhetoric, and a minority gave health advice. Cannabis dispensary websites provide a timely snapshot of marketing practices that may contribute to increases in cannabis use during stressful events.

Keywords: Cannabis, COVID-19, marketing

#### Introduction

Marked increases in cannabis sales were reported by industry and business sources during the COVID-19 pandemic,<sup>1</sup> and studies of cannabis users in the U.S.,<sup>2</sup> the Netherlands,<sup>3,4</sup> and Canada<sup>5</sup> reported increased cannabis use during the pandemic. Content analyses of Twitter<sup>6</sup> and other social media and online sources<sup>7</sup> during the pandemic found increased discussion of cannabis as treatment for COVID-19. The number of cannabis dispensaries is increasing with legalization and dispensaries are an important source of marketing messages,<sup>8</sup> but it is unknown to what extent online cannabis dispensary marketing activities may have contributed to increased pandemic sales.

We analyzed cannabis dispensary websites to gain insight into cannabis marketing practices at the start of the COVID-19 pandemic, leveraging an existing study of a small geographic area with two different historical policy contexts. The region from the San Francisco/Bay Area extending east to the Reno area of Nevada is readily accessible by car, but includes two states with contrasting regulatory contexts: California has a long history of acceptance of cannabis including the counterculture of the 1960-1970s, medical marijuana legalization in 1996, and a longstanding cannabis cultivation.<sup>9</sup> In contrast, Nevada's medical marijuana policy was implemented fairly recently in 2015. Both states approved adult use cannabis in 2016, and deemed cannabis dispensaries essential during the pandemic. Dispensaries remained open in California; in Nevada, dispensaries were initially limited to delivery, but in May 2020 allowed curbside pick-up and in-store purchases.<sup>10</sup> An August 2020 cannabis industry report found that sales rose overall during the COVID-19 pandemic, and stated that "e-commerce solutions were the key to success".<sup>11</sup> As part of an ongoing surveillance study comparing

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dispensary websites in San Francisco, Alameda and Washoe (Reno) Counties, we noted special COVID-19 announcements appeared days to weeks following lockdown and analyzed these to gain insight into industry marketing responses to the pandemic.

#### Methods

We conducted a content analysis of website announcements, comparing dispensaries in San Francisco/Alameda Counties and those within a 30 mile radius (a typical driving distance for residents) of Reno, Nevada, between April-May 2020. We obtained lists of all licensed dispensaries from local health departments and verified the businesses were open using online resources (e.g. Weedmaps). We included all dispensaries with functional websites (89%). Three trained researchers reviewed all websites and recorded all content related to COVID-19 with screenshots. COVID-19 announcements appeared on websites shortly after the stay-at-home orders were announced, often as pop-up windows appearing on top of the home page, or as an extra web page. We coded only content from the dispensary, not unrelated pop-up ads. The content codebook was adapted from a prior website content analysis instrument,<sup>12</sup> and the team iteratively reviewed, discussed, and revised codes, including six new codes specific to the COVID-19 pandemic (operation changes, employee/patron safety measures, healthcare/health rhetoric, essential business, COVID specials/discounts, references or links to government/health authorities). Two authors double coded all COVID-19 announcements for the presence of each theme; the unit of analysis was the website. The team met weekly to review and discuss discrepancies in coding and to resolve conflicts, using a fourth investigator to adjudicate if needed. Interrater reliability measured by Krippendorff's alpha was 0.77 - 1.0 for COVID-19 variables.

#### Results

COVID-19 announcements were present on 25/32 (78%) of dispensary websites in San Francisco/Alameda counties and on 9/15 (60%) of websites in the Reno area. Of the websites with COVID-19 content, almost all (88% in San Francisco/Alameda, 89% in Reno) announced operational changes (e.g. changing to delivery only services, curbside pickup or extended hours). 72% of San Francisco/Alameda and 56% of Reno websites announced safety measures like wearing masks, hand washing, cleaning surfaces, temperature checks, physical distancing, notouch payment or eliminating smell samples. Some asked patrons not to come to the dispensary if feeling ill, with reference to sick or immunocompromised clients. The majority of websites (52% in San Francisco/Alameda, 56% Reno) made references to, or provided links to, government or public health resources, either as the explanation for changes in operations, or to demonstrate that the dispensary was cooperating with health authorities. The look and feel of COVID-19 website announcements varied widely; most dispensaries utilized simple "pop up" windows on the site home page with text announcements to customers of altered hours, access or pick up policies. However a few created custom graphics for promotions or discounts, and one dispensary adorned their logo with a mask.

Health-related announcements were present in several forms. Of San Francisco/Alameda County dispensary websites, 36% referred to their status as an essential service, a theme not found on Reno area websites. The status as an essential service was often accompanied by references to cannabis as a medicine, or a connection to health authorities. For example, one San Francisco dispensary posted a quote "Cannabis is an essential medicine for many San Francisco residents. Dispensaries can continue to operate as essential businesses during this time, while

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practicing social distancing and other public health recommendations" that was attributed to the San Francisco Department of Health. Another announcement stated, "So, what are the essentials? Groceries, prescription drugs, gas, urgent medical care, and weed. This list is what's necessary for the health and safety of us all during this time." More frequently, COVID-19 announcements included more general health statements such as, "The health and safety of our staff and customers is of the utmost importance to us." A few dispensaries gave advice about ways to use cannabis, implicitly to avoid COVID-19 infection, such as, "Opt for non-invasive forms of ingestion - edibles, tinctures, drinks, soft gels" and "Do not share cannabis joints, vapes or edibles." One dispensary suggested cannabis use for anxiety, "If you are experiencing anxiety, consider using products with CBD, THCA, CBN, or low doses of THC" and this dispensary also suggested bulk purchases as a way to mitigate COVID-19 infection risk, "Limit your need to travel by stocking up on your supply. We are offering a 10% discount when you buy 4 eighths or 4 extracts (1g), stackable with our senior and veteran discounts." 44% of Reno websites included general statements about the importance of their patrons' health, while general statements were found on only 16% of Bay Area websites. However, all announcements that recommended specific ways to use cannabis to mitigate COVID-19 risk or anxiety were from Bay Area dispensaries. One Bay Area dispensary asked patrons to contact local county supervisors to advocate for cannabis as an essential service and provided links. A minority of sites (16%) in San Francisco/Alameda Counties offered COVID-19 discounts or specials, including a "heroes discount" for health workers, and discounts for those laid-off from work. One San Francisco dispensary sold surgical masks and hand sanitizer.

#### Discussion

This is, to the best of our knowledge, the first study describing the novel COVID-19related marketing communications from cannabis dispensaries during stay-at-home orders. We found that like other businesses, most cannabis dispensaries implemented operational changes, including delivery, pickup, and sanitation measures and made general statements that health and safety was important to them. In addition, however, we found some announcements on dispensary websites that were more unique to cannabis sales, such as those that linked cannabis and health, either by referring to cannabis as medicine, making references to government or health authorities, and utilizing rhetoric similar to healthcare providers, including making recommendations for cannabis forms to reduce disease transmission risk or strains to use if one was experiencing anxiety. The study's strength is that it provides a novel and timely snapshot of practices that may influence cannabis consumption in a rapidly evolving context. Surveillance of cannabis websites can complement and help to explain findings of the behavioral studies reporting increased cannabis use. This aspect of cannabis marketing may be more agile and difficult to capture with traditional marketing surveillance; the COVID-19 announcements appeared soon after lockdowns. By October 2021, all of these announcements had disappeared from all but one of the dispensary websites (one website featured a new COVID-19 banner encouraging patrons to wear masks and stay 6 feet apart). This study captured a unique transient marketing activity, suggesting that during future societal events or stressors that might impact cannabis consumption, rapid surveillance of cannabis dispensary websites is warranted. The study has several limitations: it has a small sample size, this cross-sectional analysis of dispensary websites does not represent other types of cannabis websites (e.g., exclusive delivery

services) or places without legal cannabis, and it addresses only dispensary COVID-19 announcements, not consumer behavior.

This study adds perspectives on new COVID-19 related content to prior analyses of cannabis advertising,<sup>13,14</sup> which also found retailers positioning themselves as healthcare providers. While we did not find explicit claims that cannabis could treat COVID-19, some announcements suggested ways to use cannabis to avoid infection, or suggested cannabis products to use if experiencing anxiety; these implicit connections between cannabis and health are consistent with prior studies finding cannabis dispensary health benefit claims.<sup>15</sup> This analysis was limited only to the COVID-19 announcements; a subsequent analysis of the full website content found that anxiety was the most common mental health claim, present on 80% of websites in this sample.<sup>16</sup> This limited analysis of the COVID-19 announcements from a single time point early in the pandemic likely underestimates the potential influence dispensary marketing could have on cannabis consumption. While COVID-19 announcements had largely disappeared from dispensary websites by October 2021, an informal review of the dispensary websites included in this analysis in October 2021 found that one featured a blog post on the topic, "Can marijuana cure coronavirus?" and several websites featured blog posts about using cannabis for anxiety, a topic indirectly relevant to the stress of the ongoing pandemic. While this study does not address consumer behavior, another study found in states where cannabis is legally sold, people with mood or anxiety disorders were more likely to use cannabis to selfmedicate.<sup>17</sup> The marketing tactics we observed to maintain cannabis availability and align with health authorities might contribute to increased cannabis use, particularly since other studies show stress<sup>18</sup> and decreased access to medical services<sup>19</sup> were associated with the pandemic.

This study demonstrates that cannabis dispensary websites are a timely source of data on industry responses to rapidly changing events and public health policies that may impact cannabis consumption. The study identified two tactics in the COVID-19 announcements preserved which might contribute to increased cannabis consumption: preserving ready access to cannabis as an essential service, and reinforcing perceptions of cannabis as a medicine and dispensaries as health services. While use of online ordering and delivery services has been documented in prior analyses of cannabis websites<sup>15</sup> we found these services became nearly universal after stay-at-home orders. The increase in home delivery of cannabis and other intoxicants that accompanied the COVID-19 pandemic may persist, posing new challenges for surveillance research.<sup>20</sup> Future studies should address the impact of cannabis marketing and messaging on consumer cannabis consumption and health-care seeking behavior during stressful events.

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