Trends in Internet Search Behavior for Substance Use Treatment: A Measure of Health Seeking Behavior

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Aim: As a well-established, low-cost way of assessing public demand in near real time, internet searches could potentially help health officials measure the desire for substance use treatment. This study characterizes internet search data reflecting public interest in substance use treatment in the United States.

Methods:
We tracked all Google searches (www.google.com/trends) between 2008 and 2019 originating from the United States that mentioned “quit,” “stop,” “rehab(s),” “rehabilitation,” “treatment(s)” or “addiction” in combination with “drug(s)” (e.g., “find drug treatment”). Additionally, we tracked trends of substance use treatment searches for the following substances: Alcohol (query mentioned “alcohol” or “alcoholism”), cannabis (“cannabis” or “marijuana”), cocaine (“cocaine”), methamphetamine (“methamphetamine” or “meth,”), methylenedioxy-methamphetamine (“mdma,” “molly,” or “ecstasy”), opioids (“opioid(s)”, “OxyContin”, “Codeine”, “Hydrocodone”, “morphine”, “Oxycodone”, “heroin”, “fentanyl”). Measurements are reported as query fractions (QFs), defined as the number of searches per every 10 million searches.

Results:
Nationally, the number of non-drug specific searches for substance use treatment were similar across years, with 393 QFs (corresponding to approximately 890,000 searches) in October 2019, the last month data was collected. Alcohol treatment was the most frequently searched treatment, with 208 QFs in October 2019. The greatest increase in treatment searches during the study period was for opioids, with a 624% increase in searches from 2008 to its peak number of searches in April 2018, while searches for heroin treatment increased 249% between 2008 and its peak in March 2016. Searches for cannabis, methamphetamine, and cocaine treatment remained constant during the study period.

Conclusion:
Our study identified temporal patterns in substance use treatment searches in the U.S., including a dramatic spike in opioid use treatment searches, consistent with the increased morbidity burden associated with the opioid crisis. Next steps will focus on assessing the geographic heterogeneity of these searches and their potential use to improve the targeting of substance use treatment information.