

EMCDDA DOCUMENTATION CENTRE INFORMATION BULLETIN

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JOURNAL ARTICLES

Decrease in prevalence but increase in frequency of non-marijuana drug use following the onset of the COVID-19 pandemic in a large cohort of young men who have sex with men and young transgender women

Janulis P, Newcomb ME, Mustanski B.
Drug and Alcohol Dependence, 2021, 223, 108701

Background:

Substantial concern exists regarding the impact of the COVID-19 pandemic on substance use behaviors. This is especially true for subpopulations like young men who have sex with men and young transgender women (YMSM-YTW) who report higher rates of substance use. This study examines changes in prevalence and frequency of marijuana and non-marijuana drug use among YMSM-YTW following the onset of the pandemic.

Method:

Data for this analysis (n = 458 participants, 1356 observations) come from an ongoing longitudinal cohort study of YMSM-YTW. A series of Bayesian multilevel models were used to examine change in prevalence and frequency of use for marijuana and non-marijuana drugs.

Results:

Results indicated no systematic change in prevalence or frequency of marijuana use. However, a decrease in non-marijuana drug use was observed (OR = 0.60, 95 % CrI: [0.37, 0.94]) following the onset of the pandemic. Furthermore, a small increase in the frequency of non-marijuana drug use was observed (OR = 1.79, 95 % CrI: [1.02, 3.21]) among individuals who used these substances.

Conclusions:

These findings concur with a small number of studies identifying a decrease in drug use prevalence but increase in frequency among those who continue to use drugs. Despite the protective effect of lower drug use prevalence, higher frequency of use may lead to additional negative health outcomes of drug use, particularly among groups facing multiple health challenges such as YMSM-YTW. However, the pandemic likely has a unique impact on substance use behaviors across subpopulations.

COVID-19 and the drug overdose crisis: uncovering the deadliest months in the United States, January–July 2020

Friedman, J; Akre, S
American Journal of Public Health
15 April 2021
DOI: 10.2105/AJPH.2021.306256

Objectives

To determine the magnitude of increases in monthly drug-related overdose mortality during the COVID-19 pandemic in the United States.

Methods

We leveraged provisional records from the Centers for Disease Control and Prevention provided as rolling 12-month sums, which are helpful for smoothing, yet may mask pandemic-related spikes in overdose mortality. We cross-referenced these rolling aggregates with previous monthly data to estimate monthly drug-related overdose mortality for January through July 2020. We quantified

historical errors stemming from reporting delays and estimated empirically derived 95% prediction intervals (PIs).

Results

We found that 9192 (95% PI = 8988, 9397) people died from drug overdose in May 2020—making it the deadliest month on record—representing a 57.7% (95% PI = 54.2%, 61.2%) increase over May 2019. Most states saw large-magnitude increases, with the highest in West Virginia, Kentucky, and Tennessee. We observed low concordance between rolling 12-month aggregates and monthly pandemic-related shocks.

Conclusions

Unprecedented increases in overdose mortality occurred during the pandemic, highlighting the value of presenting monthly values alongside smoothed aggregates for detecting shocks.

Research on substance use disorders during the COVID-19 pandemic

Volkow, N D; Blanco, C

Journal of Substance Abuse Treatment, 2021, 129, 108385

The COVID-19 pandemic has triggered changes in the substance use disorder (SUD) treatment delivery system, in the availability of legal and illicit drugs, and in other social and economic factors. As such, these changes necessitate that the field re-evaluate research approaches to SUDs, including in epidemiology, clinical trials, health services, implementation and policy research, as well as basic and translational neuroscience. COVID-19 has reduced researchers' access to target populations and made it difficult for them to obtain timely data to monitor changes in patterns of drug use and overdoses. These changes have increased researchers' interest in virtual technologies to expand and accelerate access to populations; increased modifications in the design, conduct, and analysis of clinical trials; and increased emphasis on implementation. Similarly, as researchers better understand the biology of COVID-19, they will better understand potential effects of COVID-19 on neurotransmitter receptors and signaling pathways, mechanisms underlying COVID-19 associated neurological and psychiatric sequelae, and interactions between COVID-19 treatments and psychoactive substances. The pandemic has also revealed the need for research that addresses health disparities. Overall, the COVID-19 pandemic has challenged several aspects of current research on SUD. Responding to these challenges provides opportunities to develop robust research approaches that align with the goals of improving patient outcomes and public health and are resilient to the challenges of future crises.

The rapidly changing composition of the global street drug supply and its effects on high-risk groups for COVID-19

Browne, T; Gold, M S; Martin, D M

Current Psychopharmacology

19 April 2021

DOI : 10.2174/2211556010666210125124645

Background:

Globally, an alarming number of pharmaceutically active compounds are now routinely added to the street drugs of abuse, cocaine and heroin. In some cases, seventeen (17) or more potentially toxic compounds are found in a single street purchased bag or block of cocaine or heroin. Pharmacologically active compounds, impurities, or breakdown products from drug manufacturing and industrial chemicals (collectively referred to as toxic adulterants) are now found in street drugs. They include, but are not limited to: antipsychotics, antidepressants, anxiolytics, antihistamines, anthelmintics, anesthetics, anti-inflammatorys, antipyretics, analgesics, antispasmodics, antiarrhythmics, antimalarials, veterinary medications, broncho-dilators, expectorants, sedatives, muscle relaxers, natural/synthetic hallucinogens, decongestants, new psychoactive substances (NPS), industrial compounds, fungicides, and impurities in the manufacturing process. All can be found within a single street purchase of heroin or cocaine. Routine clinical or workplace drug testing will not detect all these toxic adulterants. Only specialty forensic tests, specifically ordered, will detect them. The synergistic effect on the human body of such an unprecedented combination of pharmacologically active compounds is unknown and potentially deadly. This is especially seen in daily abusers who are exposed to these combinations multiple times a day over an extended period of time. Individuals with substance use disorders (SUDs) have several co-occurring health problems that make them more susceptible to Covid-19, including compromised immune, pulmonary, cardiovascular, and respiratory systems. These problems are high-risk factors for the acquisition of Covid-19 infection and more serious complications from the virus, including hospitalization and death.

Objective:

To bring to the attention of public health officials, addiction medicine specialists, treatment officials, therapists, and the general public the alarming increase of dangerous toxic adulterants being added

to street drugs and their potentially lethal synergistic effects. Also, to provide insights into how these new formulations can have serious pathophysiological effects on individuals with Substance Abuse Disorders (SUDs) during the COVID-19 pandemic.

Methods:

The literature on street drug cutting agents, toxic adulterants, NPS, manufacturing byproducts, and other industrial compounds will be reviewed. Also a review of the literature of pathophysiological effects, especially on SUD patients, in light of the COVID-19 pandemic will be presented. This is combined with international and USA studies that were carried out by the Colombo Plan that identified these new combinations of toxic adulterants in street drugs, using state of the art field and forensic laboratory detection technologies.

Results:

The majority of street drugs, in some cases more than ninety-five percent, now have multiple toxic adulterants. It is rare that a street purchase of cocaine or heroin does not contain multiple toxic adulterants, cutting agents, NPS, manufacturing byproducts, or industrial chemicals.

Conclusion:

This dangerous new composition in world street drug supply is unprecedented and may be the undetected cause of many psychostimulant and opioid overdose deaths, as many toxic adulterants are not routinely tested in post-mortem or street drug seizure cases. In addition, several of these toxic adulterants create a catastrophic drop in white blood cells, causing neutropenia and making the abusers susceptible to a wide range of opportunistic infections, including COVID-19. This profound change in the world street drug supply has catastrophic implications for individuals with SUDs and our health care system, especially in the era of the COVID-19 pandemic.

Substance use and mental health in pregnant women during the COVID-19 pandemic

Smith, C L, Waters, S F, Spellacy, D, et al
Journal of Reproductive and Infant Psychology
17 April 2021
doi: 10.1080/02646838.2021.1916815

Objectives:

We examined the prevalence of substance use as a coping mechanism and identified relationships between maternal mental health over time and use of substances to cope during the Coronavirus Disease 2019 (COVID-19) pandemic among pregnant women in the U.S.A.

Methods:

Self-reported repeated measures from 83 pregnant women were collected online in April 2020 and May 2020. Women retrospectively reported their mental/emotional health before the pandemic, as well as depression, stress, and substance use as a result of the pandemic at both time points. Linear regression measured cross-sectional and longitudinal associations between mental health and substance use.

Results:

Pre-COVID-19 reports of poorer mental/emotional health ($b = 0.46$) were significantly ($p < .05$) associated with number of substances used to cope with the pandemic. Elevated stress ($b = 0.35$) and depressive symptoms ($b = 0.27$) and poorer mental/emotional health ($b = 0.14$) in April were also significantly related to higher numbers of substances used in May ($p < .05$).

Conclusion:

Pregnant women's psychological well-being may be a readily measured indicator substance use risk during crises such as the COVID-19 pandemic. Interventions addressing increased stress and depression may also mitigate the emergence of greater substance use among pregnant women .

Opioid-related emergency department visits during COVID-19 in a large health system

Hall GT, Cruz DS, Lank PM, McCarthy DM, Kim HS.
Journal of Addiction Medicine
15 April 2021
doi: 10.1097/ADM.0000000000000850

Objective:

Multiple states have reported increases in opioid overdose deaths during the coronavirus disease 2019 (COVID-19) pandemic, however little is known about opioid-related presentations to the emergency department (ED).

Methods:

This was a time series analysis of visits to 7 EDs in greater Chicago, Illinois from October 20, 2019 to July 25, 2020. We compared the number of ED visits for opioid-related diagnoses in the time period preceding the World Health Organization pandemic declaration (prepandemic period, October 20, 2019-July 3, 2020) to the time period following the World Health Organization declaration (pandemic

period, March 8, 2020 to July 25, 2020) using a single-group interrupted time series analysis with Newey-West standard errors. We also present data on alcohol-related ED visits for comparison.

Results:

We evaluated a total of 177,405 visits across the 7 EDs during the study period. The mean number of weekly ED visits in the prepandemic and pandemic periods was 4841 and 4029 weekly visits, respectively. In the interrupted time series analysis, there was no significant immediate effect of the pandemic start on opioid-related ED visits (-0.44 visits per 1000 ED visits, 95% CI -2.47 to 1.58, $P = 0.66$), however, there was a significant immediate effect of the pandemic start on alcohol-related ED visits (-4.1, 95% CI: -8.25 to -0.01, $P < 0.05$).

Conclusions:

Despite reductions in overall ED visit volumes and alcohol-related visits during COVID-19, the number of opioid-related visits was not significantly reduced during the early pandemic. These data reinforce the need to provide comprehensive treatment services for opioid use disorder during the co-occurring COVID-19 and opioid crises.

Rethinking home-based outpatient parenteral antibiotic therapy for persons who inject drugs: an opportunity for change in the time of COVID-19

Jawa, R, Rozansky, H, Clemens, D, et al

Journal of Addiction Medicine

9 April 2021

doi: 10.1097/ADM.0000000000000856

Outpatient parenteral antibiotic therapy (OPAT) refers to the monitored provision of intravenous antibiotics for complicated infections outside of a hospital setting, typically in a rehabilitation facility, an infusion center, or the home. Home-based OPAT allows for safe completion of prolonged courses of therapy while decreasing costs to the healthcare system, minimizing the risk of hospital-related infectious exposures for patients, and permitting patients to recover in a familiar environment. Amidst the COVID-19 pandemic, during which nursing facilities have been at the center of many outbreaks of the SARS-CoV-2 virus, completion of antimicrobial therapy in the home is an even more appealing option. Persons who inject drugs (PWID) frequently present with infectious complications of their injection drug use which require long courses of parenteral therapy. However, these individuals are frequently excluded from home-based OPAT on the basis of their addiction history. This commentary describes perceived challenges to establishing home-based OPAT for PWID, discusses ways in which this is discriminatory and unsupported by available data, highlights ways in which the COVID-19 pandemic has accentuated inequities in care, and proposes a multidisciplinary approach championed by Addiction specialists to increasing implementation of OPAT for appropriate patients with substance use disorders.

COVID-19 and the drug overdose crisis: uncovering the deadliest months in the United States, January–July 2020

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Conclusions

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Changes in substance supply and use characteristics among people who use drugs (PWUD) during the COVID-19 global pandemic: A national qualitative assessment in Canada

Ali, F; Russell, C; Nafeh, F; et al

International Journal of Drug Policy, 20 April 2021, 103237

Background

People who use drugs (PWUD) may be at an increased risk of experiencing negative effects related to COVID-19. Border and non-essential service closures may have placed PWUD at an increased risk of experiencing unintended consequences regarding drug consumption and supply patterns, as well as related outcomes. However, the extent of these effects upon this population is unknown. The current study examined how COVID-19 has impacted substance use supply and use characteristics among a national cohort of PWUD in Canada.

Methods

We conducted semi-structured one-on-one telephone-based interviews with 200 adult PWUD across Canada who were currently using a licit or illicit psychoactive substance at least weekly, and/or currently receiving opioid agonist treatment (OAT). Thematic analyses were conducted using qualitative software.

Results

PWUD attributed adverse changes to their substance use frequency, supply, use patterns, and risk behaviors and outcomes to COVID-19. Many participants noted supply disruptions with the majority indicating a decrease in potency and availability, and an increase in the price of substances since COVID-19. Nearly half of participants specified that they had increased their substance use, with some experiencing relapses. In terms of changes to risk level, many participants perceived they were at a greater risk for experiencing an overdose.

Conclusion

This study demonstrated the impacts of COVID-19 on PWUD, including a significant disruption substance supply. For many, these changes led to increased use and substitution for toxic and adulterated substances, which ultimately amplified PWUD's risk for experiencing related harms, including overdoses. These findings warrant the need for improved supports and services, as well as accessibility of safe supply programs, take home naloxone kits, and novel approaches to ensure PWUD have the tools necessary to mitigate risk when using substances.

How emergency department visits for substance use disorders have evolved during the early COVID-19 pandemic

Pines, J M; Zocchi, M S; Black, B S; et al

Journal of Substance Abuse Treatment, 2021, 129, 108391

Objective:

Higher opioid overdoses and drug use have reportedly occurred during the COVID-19 pandemic. We provide evidence on how emergency department (ED) visits for substance use disorders (SUD) changed in the early pandemic period.

Methods:

Using retrospective data from January–July 2020 compared to January–July 2019, we calculated weekly 2020/2019 visit ratios for opioid-related, alcohol-related, other drug-related disorders, and all non-COVID-19 visits. We assess how this ratio as well as overall visit numbers changed after the mid-March 2020 onset of general pandemic restrictions.

Results:

In 4.5 million ED visits in 2020 and 2019 to 108 EDs in 18 U.S. states, SUD visits were higher in early 2020 compared to 2019. During the peak-pandemic restriction period (March 13–July 31), non-COVID-19, non-SUD visits fell by approximately 45% early on, and then partly recovered with an average decline of 33% relative to 2019 levels. Visits for opioid-related, alcohol-related, and other drug-related disorders also declined, although less sharply, with an average drop of 17%, which was similar across SUD types. The visit ratios for 2020/2019 partially or fully recovered later in our sample period, depending on SUD type, but did not exceed early-2020 levels. However, substantial variation occurred across SUD types and across states. SUD visit declines were most prominent in the 65+ age group, except for alcohol-related visits where trends were similar across ages. SUD visits arriving by ambulance declined less or increased relative to self-transport visits, and ED deaths were rare.

Conclusions:

The 2020/2019 ratios of SUD ED visits fell substantially early in the COVID-19 pandemic, yet less than non-SUD, non-COVID ED visits. SUD ED visit ratios partly or fully recovered to 2019 levels by early June 2020, but did not exceed early 2020 ratios.

Big Events theory and measures may help explain emerging long-term effects of current crises

Friedman, S R; Mateau-Gelabert, P; Nikolopoulos, G K; et al
Global Public Health
11 April 2021
DOI: 10.1080/17441692.2021.1903528

Big Events are periods during which abnormal large-scale events like war, economic collapse, revolts, or pandemics disrupt daily life and expectations about the future. They can lead to rapid change in health-related norms, beliefs, social networks and behavioural practices. The world is undergoing such Big Events through the interaction of COVID-19, a large economic downturn, massive social unrest in many countries, and ever-worsening effects of global climate change. Previous research, mainly on HIV/AIDS, suggests that the health effects of Big Events can be profound, but are contingent: Sometimes Big Events led to enormous outbreaks of HIV and associated diseases and conditions such as injection drug use, sex trading, and tuberculosis, but in other circumstances, Big Events did not do so. This paper discusses and presents hypotheses about pathways through which the current Big Events might lead to better or worse short and long term outcomes for various health conditions and diseases; considers how pre-existing societal conditions and changing 'pathway' variables can influence the impact of Big Events; discusses how to measure these pathways; and suggests ways in which research and surveillance might be conducted to improve human capacity to prevent or mitigate the effects of Big Events on human health.

US drug overdose deaths surged during COVID-19 lockdowns

More than 87,200 people in the U.S. died from drug overdoses, primarily related to opioids, between September 2019 and September 2020

<https://www.livescience.com/drug-overdose-deaths-high-during-pandemic.html>

Global street drug supply and its effects on high-risk groups for COVID-19

https://www.eurekalert.org/pub_releases/2021-04/bsp-gsd041621.php

Large numbers of regular drug users report increased substance use during COVID-19

CAMH survey indicates drug users are being disproportionately impacted by COVID in a variety of ways, in large part due to supply disruption and other COVID-related societal changes.

https://www.eurekalert.org/pub_releases/2021-04/cfaa-lno042021.php

Pandemic has blocked access to treatment for many Americans hooked on opioids

<https://medicalxpress.com/news/2021-04-pandemic-blocked-access-treatment-americans.html>

The other pandemic: addiction amid COVID-19

COVID-19 has exacerbated one of the nation's worst pre-pandemic health crises: addiction, and the despair that comes with it. In West Virginia, those trying to help have witnessed the devastation firsthand.

<https://www.usnews.com/news/health-news/photos/2021/04/21/the-other-pandemic-drug-alcohol-addiction-amid-covid-19>