EMCDDA DOCUMENTATION CENTRE INFORMATION BULLETIN

CORONAVIRUS, 25 September 2020

GREY LITERATURE

Global drug market shifts during the COVID-19 pandemic
National Drug and Alcohol Research Centre (NDARC)
Sydney: 2020

How have illegal drug markets adapted to the emergence of COVID-19 and social/mobility restrictions imposed across many nations?
https://ndarc.med.unsw.edu.au/resource/global-drug-market-shifts-during-covid-19-pandemic

Nonfatal opioid overdoses at an urban emergency department during the COVID-19 pandemic
Ochalek, T A; Cumpston, K L; Wills, B K
Journal of the American Medical Association
18 September, 2020
DOI:10.1001/jama.2020.17477

Analysis of drug test results before and after the US Declaration of a National Emergency concerning the COVID-19 outbreak
Wainwright, J J; Mikre, M; Whitley, P; et al
Journal of the American Medical Association
18 September, 2020
DOI:10.1001/jama.2020.17694

The opioid epidemic during the COVID-19 pandemic
Haley, D F; Saitz, R
Journal of the American Medical Association
18 September, 2020
DOI:10.1001/jama.2020.18543

Digital clinical trials for substance use disorders in the age of Covid-19
Brezing, C A, Luo, S X, Mariani, J J, Levin, F R
Journal of Addiction Medicine
18 September 2020
doi: 10.1097/ADM.0000000000000733

As a result of the coronavirus 2019 (Covid-19) pandemic, clinical research for substance use disorders (SUDs) has been impeded due to widespread stay-at-home mandates limiting the operations of "non-essential" work. Although appropriate to proceed with an abundance of caution to prevent viral spread, there will be detrimental consequences for patients with SUDs if clinical trials research cannot adapt and continue uninterrupted. The field of digital health has strong evidence for its feasibility and effectiveness and offers tools that can facilitate the continuation of SUD clinical trials research remotely in accordance with Covid-19 precautions. Some digital tools have been used as components of SUD research in the past; however, no published clinical trial in SUDs to-date has been entirely virtual. This has important implications for disrupted clinical care, as providers seek guidelines for best digital practices. This paper provides a roadmap for integrating the fields of digital health and SUD clinical trials by proposing methods to complete recruitment, screening, informed consent, other study procedures, and internal lab operations digitally. The immediate future of SUD research depends on the ability to comply with social distancing. Investment in research of digital clinical trials for SUDs provides an opportunity to cultivate benefits for research and clinical care long-term as we can (1) define regulatory requirements for the implementation of digital systems, (2) develop consensus on system-wide standards and protocols in the appropriate use of technology, and (3) gain experience that can translate to the treatment of patients with SUDs through telehealth in the community.

Self-reported alcohol, tobacco, and cannabis use during COVID-19 lockdown measures: results from a web-based survey
Vanderbruggen N, Matthys F, Van Laere S, et al
European Addiction Research
22 September 2020
doi: 10.1159/000510822

Background:
The outbreak of coronavirus disease 19 (COVID-19) has led to measures of social distancing and quarantine worldwide. This stressful period may lead to psychological problems, including increases in substance use.
Objective:
To investigate changes in alcohol, tobacco, and cannabis consumption before and during COVID-19 lockdown and motives for these changes in substance use.
Method:
A web-based survey was filled out by an unselected population during the social distancing measures of the COVID-19 pandemic in Belgium that assessed changes in alcohol, tobacco, and cannabis

consumption in the period before and during the COVID-19 lockdown and also asked about reasons for change.
Results:
A total of 3,632 respondents (mean age 42.1 ± 14.6 years; 70% female) filled out the survey. Overall, respondents reported consuming more alcohol (d = 0.21) and smoking more cigarettes (d = 0.13) than before the COVID-19 pandemic (both $p < 0.001$), while no significant changes in the consumption of cannabis were noted. The odds of consuming more alcohol during the lockdown were associated with younger age (OR = 0.981, $p < 0.001$), more children at home (OR = 1.220, $p < 0.001$), non-healthcare workers ($p < 0.001$), and being technically unemployed related to COVID-19 ($p = 0.037$). The odds of smoking more cigarettes during the lockdown were associated with younger age (OR = 0.988, $p = 0.027$), current living situation ($p < 0.001$), lower education ($p = 0.015$), and working situation related to COVID-19 ($p = 0.018$). Boredom, lack of social contacts, loss of daily structure, reward after a hard-working day, loneliness, and conviviality were the main reasons for consuming more of the various substances.
Conclusions:
During the lockdown, individuals consumed slightly more alcohol and smoked marginally more cigarettes compared to the period before the lockdown. Further research focussing on follow-up of individuals at risk may be useful to provide appropriate care in post-COVID times.

COVID-19 survey among people who use drugs in three cities in Norway
Welle-Strand GK, Skurtveit S, Clausen T, et al
Drug and Alcohol Dependence
18 September 2020
doi: 10.1016/j.drugalcdep.2020.108302

Background:
Little is known regarding what people who use drugs (PWUD) know about COVID-19 related issues and changes in the drug market due to COVID-19. We therefore conducted a survey to explore these issues.
Methods:
In a cross-sectional study, we interviewed 226 PWUD from three Norwegian cities in May/June 2020. Participants completed an interview-administrated questionnaire. Three separate multiple binary logistic regression models were estimated with the outcomes (no/yes): 1. Familiarity with COVID-19 symptoms, 2. Awareness of COVID-19 services tailored towards PWUD and, 3. Willingness to take a COVID-19 test.
Results:
The mean age was 44.1 years and 73 % were males. Fifty-four percent were injectors, and heroin/other opioids (35.8 %) and cocaine/amphetamine (25.2 %) were the most common main drugs used. Overall, 54.9 % were in opioid maintenance treatment (OMT). The majority (65.9 %) stated they knew the COVID-19 symptoms. Almost all the participants (91.2 %) reported they would take a COVID-19 test if experiencing relevant symptoms. The majority (63.7 %) were not aware of COVID-19 services available to PWUD. OMT patients were more likely to be familiar with COVID-19 symptoms (aOR = 3.4, 95 % CI 1.7; 6.8), and to be aware of COVID-19 services (aOR = 2.7, 95 % CI 1.1; 6.3). Overall, 35.4 % reported reduced drug availability, mainly for tranquilizers, while 61.5 % reported increased drug prices, mainly for cannabis.
Conclusion:
Drug treatment may play an important role in COVID-19 prevention, as those in OMT were more likely to be aware of symptoms and of availability of services.

Putative COVID-19 induction of reward deficiency syndrome (RDS) and associated behavioral addictions with potential concomitant dopamine depletion: is COVID-19 social distancing a double-edged sword?
Blum K, Cadet JL, Baron D, Badgaiyan RD, et al
Substance Use and Misuse
22 September 2020
doi: 10.1080/10826084.2020

Background :
The overwhelming fatalities of the global COVID-19 Pandemic will have daunting epigenetic sequala that can translate into an array of mental health issues, including panic, phobia, health anxiety, sleep disturbances to dissociative like symptoms including suicide.
Method:
We searched PUBMED for articles listed using the search terms "COVID 19 Pandemic", COVID19 and genes," "stress and COVID 19", Stress and Social distancing:

Results:
Long-term social distancing may be neurologically harmful, the consequence of epigenetic insults to the gene encoding the primary receptor for SARS-CoV2, and COVID 19. The gene is Angiotensin I Converting-Enzyme 2 (ACE2). According to the multi-experiment matrix (MEM), the gene exhibiting the most statistically significant co-expression link to ACE2 is Dopa Decarboxylase (DDC). DDC is a crucial enzyme that participates in the synthesis of both dopamine and serotonin. SARS-CoV2-induced downregulation of ACE2 expression might reduce dopamine and serotonin synthesis, causing hypodopaminergia. Discussion: Indeed, added to the known reduced dopamine function during periods of stress, including social distancing the consequence being both genetic and epigenetic vulnerability to all Reward Deficiency Syndrome (RDS) addictive behaviors. Stress seen in PTSD can generate downstream alterations in immune functions by reducing methylation levels of immune-related genes.
Conclusion:
Mitigation of these effects by identifying subjects at risk and promoting dopaminergic homeostasis to help regulate stress-relative hypodopaminergia, attenuate fears, and prevent subsequent unwanted drug and non-drug RDS type addictive behaviors seems prudent.

Addicted hit harder by COVID-19, nationwide study shows; doctors urged to make 'action plans'
https://eu.cincinnati.com/story/news/2020/09/21/addicted-opioid-tobacco-use-higher-covid-19-nida-research-shows/5802613002/

Emergency room experienced a surge in opioid overdoses during pandemic
In a paper published Friday by the Journal of the American Medical Association, Virginia Commonwealth University researchers released data showing an alarming surge in opioid-related overdoses during the COVID-19 pandemic | Medical Xpress, USA
https://medicalxpress.com/news/2020-09-emergency-room-experienced-surge-opioid.html