Welcome to the first weekly newsletter of 2021 from the Center for Addiction Research! Each newsletter includes highlights from Addiction in the News topics, active funding opportunities offered by NIDA/NIAAA as well as “CAR Member New Publications”.

Thank you for your interest in the Center for Addiction Research - our mission is to accelerate scientific progress in the prevention and treatment of substance use disorders and their consequences by fostering research collaborations across: 1) UC departments, colleges, and centers including Cincinnati Children’s Hospital Medical Center; 2) Local, regional, and state community and governmental partners; and 3) Other academic institutions and industry."

**CDC Reports Record Number Of Drug Overdose Deaths In A 12-Month Period.**

*Fox News* (12/18, Rivas, 23.99M) reported “there were more than 81,000 drug overdose deaths in the U.S. in the year leading up to May 2020, which surpassed record highs, according to a grim update from the” CDC. Even though “drug-related fatalities were already on the rise, the national health agency suggested the novel coronavirus pandemic exacerbated the issue.” CDC Director Robert Redfield said, “The disruption to daily life due to the COVID-19 pandemic has hit those with substance use disorder hard. ... As we continue the fight to end this pandemic, it’s important to not lose sight of different groups being affected in other ways. We need to take care of people suffering from unintended consequences.” National Center for Injury Prevention and Control Director Deb Houry “called the uptick in deaths concerning.”

The *Washington Times* (12/18, Tan, 626K) reported “synthetic opioids, mainly fentanyl, seem to be driving the increases in overdose deaths, according to the CDC, jumping more than 38% from the 12-month period ending June 2019 to the yearlong period ending in May.” Furthermore, “during this period, 37 of 38 jurisdictions in the U.S. with relevant data reported increases in synthetic opioid-related overdose deaths with 18 of them reporting increases exceeding 50%.”
Some Experts Fear Pandemic Could Worsen Suicide Rates Among Youth Living On Native American Reservations.

**TIME** (12/21, Reardon, 18.1M) reports, “Youth suicide rates have been increasing in the U.S. over the past decade.” Between the years “2007 and 2017, the rate nearly tripled for children aged 10 to 14, and rose 76% among 15- to 19-year-olds, according to the U.S. Centers for Disease Control and Prevention.” Some “mental health experts fear the pandemic could make things worse, particularly for kids who live on rural native American reservations.” Don Wetzel, tribal liaison for the Montana Office of Public Instruction and a member of the Blackfeet Nation, said, “I think if you want to look at resiliency in this country, you look at our Native Americans.” In Montana, there have been “231 suicides this year, with the highest rates occurring in rural counties,” and “those numbers aren’t much different from a typical year, says Karl Rosston, suicide prevention coordinator for the state’s Department of Public Health and Human Services.”

**Mobile Addiction Units Serve Rural Towns to Help Those With Addiction**

A group of specialized Winnebago RVs are traveling to the rural areas in Colorado. And while they may look like your standard RV on the outside, on the inside they are a safe haven for those trying to overcome addiction. These mobile addiction units are equipped with people who can help: a nurse, counselor, and peer support.

**Adverse Childhood Experiences Are Associated With At-Risk Drinking, Cannabis And Illicit Drug Use In Females But Not Males: An Emergency Department Study**

Adverse childhood experiences (ACEs) are associated with adult substance use in the general population and understanding how ACEs are associated with substance use among urban Emergency Department (ED) patients could help inform design of effective screening, brief interventions, and referral to treatment. This study estimated gender differences in the prevalence of separate and cumulative ACEs among a sample of urban ED patients to assess an association with at-risk drinking, cannabis, and illicit drug use. The findings indicate that ACEs (separate and cumulative) are associated with greater odds of substance use among female than in male ED patients.

**Artificial Intelligence-Based Tool May Help Diagnose Opioid Addiction Earlier**

Researchers have used artificial intelligence to develop a prediction model which led to a diagnosis of opioid use disorder about 14.4 months earlier than when diagnosed clinically. The model was generated from information of 10 million medical insurance claims, 550,000 patient records, spanning from 2006 through 2018. It relied on data such as demographics, chronic conditions, diagnoses and procedures, and medication prescriptions.
Pandemic Pushes Back Historic Opioid Lawsuit.
The Washington Post (12/26, Kornfield, 10.52M) reported the pandemic has stalled landmark opioid litigation filed by “more than 3,000 cities, towns, Native American tribes and other groups.” Two federal trials have been “delayed – a May 2021 trial in Cleveland against pharmacy chains was pushed to next October and a January trial in West Virginia was put off with no rescheduled date.” Meanwhile, the pandemic has “worsened the opioid crisis, which has caused more than 400,000 overdose deaths in the past two decades.”

Feinstein: ONDCP Must Declare Meth An Emerging Drug Threat.
In a Los Angeles Times (12/29, 3.37M) op-ed, Sen. Dianne Feinstein (D-CA) urges action to address the growing epidemic of methamphetamine addiction, including support for the Methamphetamine Response Act introduced by Feinstein and Sen. Charles E. Grassley (R-IA) this past fall. Feinstein calls for the White House Office of National Drug Control Policy to declare meth an emerging drug threat, and to develop and implement a plan to address its use that includes not only law enforcement efforts, but prevention and treatment programs. Feinstein points out that a directive to finalize regulations for designating emerging drug threats was passed Sunday as part of the end-of-year omnibus bill, and says that the drug control policy office should “finish that work as quickly as possible.” Feinstein cites CDC data that found that in a nine year period, there was a 43% increase in the number of people admitted nationwide for meth-related treatment, and DEA data that show meth availability has been growing as prices declined.

Researchers In San Antonio Discover How Alcohol Limits The Ability To Pay Attention.
KSAT-TV San Antonio (12/31, Talbot, 440K) reports, “A new study published by researchers at UT Health San Antonio” discovered how alcohol “impacts a person’s decision-making under the influence.” The study (12/2, Ye, 194K), which received partial funding from the National Institute on Alcohol Abuse and Alcoholism and the National Institute of Mental Health, “was published earlier this month in Nature Communications.” Researchers studied a cell type in mice’s brains called astrocytes and “found that when under the influence of alcohol, the body does not activate norepinephrine, which in turn does not increase calcium production.”

Pandemic Mental Health: Entering The ‘Fourth Wave’?
MedPage Today (12/31, Hlavinka, 183K) reported, “Earlier this year, experts warned of a rise in suicides, overdose deaths, and mental health problems resulting from COVID-19 and its economic and social stressors,” and in an update, MedPage Today looked “at how views have evolved with a vaccine now on the horizon.” LatinX and Black “individuals, along with Native Americans, have been disproportionately
killed by COVID-19,” but “many patients of color don’t have access to providers who look like them,” according to one expert. What’s more, in order “to increase access for substance use disorder, the Substance Abuse and Mental Health Services Administration...loosened regulations on prescribing medication-assisted treatment to include telemedicine providers.” Director of the National Institute on Drug Abuse, part of the NIH, Nora Volkow, MD, said that “patients with mental illness and substance use are at an increased risk of COVID-19 infection, adding to this population’s vulnerability.”

Overcoming Addiction Has Reportedly Become More Difficult Amid Pandemic.
The New York Times (1/4, Goldberg, 20.6M) reports “addiction is often referred to as a disease of isolation, and overcoming that challenge has only become more difficult during a pandemic that has forced people indoors – in some cases to live lonely lives, with drugs and alcohol as a way to cope with the stress.” Some “studies have shown that binge drinking has increased during the pandemic, and a recent report from the Centers for Disease Control and Prevention cited a ‘concerning acceleration’ of opioid-related overdoses last year.” Meanwhile, “many treatment centers have closed down or limited in-person visits.”

Individuals With Major Depressive Disorder May Have A Genetic Liability Which Increases Risk For Opioid Use.
Neurology Advisor (1/4, Nye) reports, “Researchers from the National Institute on Alcohol Abuse and Alcoholism observed a potential genetic link between major depressive disorder (MDD) and anxiety and stress-related disorders (ASRD) with increased prescription opioid use.” In a “single-variable model,” the “risk for opioid use was increased among individuals with MDD.” The findings were published in JAMA Psychiatry.

Even ‘Light’ Smoking Can Quickly Become Addictive.
HealthDay (1/4, 11K) reports, “A new study finds that people who are casual cigarette smokers can also be addicted to nicotine.” In “the study, the researchers examined data from more than 6,700 smokers who had been assessed to see if they met the DSM-5 criteria for tobacco use disorder,” and “found that 85% of daily cigarette smokers were addicted to nicotine.” The findings were published in the American Journal of Preventive Medicine. HealthDay notes, “For more on nicotine addiction, head to the U.S. National Institute on Drug Abuse.”

In an opinion piece for the Los Angeles Times (1/5, 3.37M), Joseph Friedman, an MD/PhD student at UCLA who studies the US overdose crisis, and Morgan Godvin, a harm reductionist and commissioner on the Oregon Alcohol and Drug Policy Commission, write that “while Americans have focused on the COVID-19 pandemic,
another epidemic has also been killing people across the country in unprecedented numbers: overdose deaths. And the two crises aren’t unconnected.” The authors say “higher levels of social isolation and instability during the pandemic have added fuel to an already serious overdose crisis.” They write, “With record numbers of Americans dying from both COVID-19 and overdoses, action is desperately needed. The federal government must embrace commonsense measures proven to work. American lives are on the line.”

FDA Issues Draft Guidance On “N Of 1” Clinical Trials.
Bloomberg Law (1/4, Baumann, Subscription Publication, 4K) reports the FDA issued draft guidance “to help researchers design and pursue a type of ‘N of 1’ clinical trial, in which a single patient is the entire study population.” Under the draft guidance, “more clinical trials for patients battling life-threatening genetic disorders could open up.”

Covid Treatment Push Prompts Calls For Faster Public Trial Data.
Bloomberg Law (1/6, Baumann, Subscription Publication, 4K) reports, “The need for reliable Covid-19 treatments is spurring calls for the government to invoke a legal clause that would require drug companies and NIH-funded researchers to post their study results within a month instead of a year.” Former FDA Commissioner Robert Califf said in an interview. “Those designing new trials should have access to everything else that’s been done as quickly as possible.” The article adds, “Too many small trials are asking similar questions and not enough trials are providing reliable answers to them, Califf wrote in a tweet in which he tagged NIH Director Francis S. Collins and the FDA’s longtime drug chief Janet Woodcock, among others.”

NIDA: Teen Vaping Levels Seem To Have Plateaued In 2020.
HealthDay (1/5, 11K) reports that U.S. “teen vaping levels remained high in 2020 but have not increased substantially since 2019,” according to results from the annual Monitoring the Future survey, which is funded by the National Institute on Drug Abuse (NIDA).” The results were published on December 15, 2020. Commenting on the findings, NIDA Director Nora D. Volkow, MD stated, “The rapid rise of teen nicotine vaping in recent years has been unprecedented and deeply concerning since we know that nicotine is highly addictive and can be delivered at high doses by vaping devices, which may also contain other toxic chemicals that may be harmful when inhaled. ... It is encouraging to see a leveling off of this trend, though the rates still remain very high.”

Opioid Use Hits Construction Industry As Overdoses Soar.
The Wall Street Journal (1/5, Monga, Subscription Publication, 8.41M) reports that the opioid epidemic has increased costs to the construction industry as laborers
turn to prescription drugs to treat workplace injuries, according to a 2019 report by Barclays Research that was based on data from the Bureau of Labor Statistics and the National Institute on Drug Abuse.

Additional Sources. In a story focusing on the CDC numbers, the Philadelphia Inquirer (1/5, Whelan) reports that the 81,230 fatalities between May 2019 and May 2020 marked the highest total of drug fatalities the CDC has logged over the course of a 12-month timeframe. CDC Director Robert Redfield “told MedPage Today in a statement that the ‘disruption to daily life’ during the pandemic has ‘hit those with substance use disorder hard.’” Redfield also said, “As we continue the fight to end this pandemic, it’s important to not lose sight of different groups being affected in other ways,” adding, “We need to take care of people suffering from unintended consequences.”

A New Tool In Treating Mental Illness: Building Design.
The New York Times (1/5, Margolies, 20.6M) says that “for decades, psychiatric hospitals were grim settings.” However, recent research concerning “the health effects of our surroundings is spurring the development of facilities that feel more residential, with welcoming entrances, smaller living units within larger buildings and a variety of gathering spaces.” The fresh approach has yielded “environments that are more calming and supportive. And it feels particularly timely, given the surge in mental health issues created by the pandemic.” Prior to the pandemic, the amount of Americans impacted “by mental illness was at a new high,” with the National Institute of Mental Health having indicated that one out of five adults was dealing with some malady. Now, “more people are suffering. Young adults and Black and Latino people of all ages are reporting increased levels of anxiety, depression and substance abuse, according to a survey from the Centers for Disease Control and Prevention.”

Funding Opportunities

PAR-20-316
Countermeasures Against Chemical Threats (CounterACT) Research Centers of Excellence (U54 Clinical Trial Optional)
NOT-MH-21-075
Notice of Special Interest (NOSI) regarding the Use of Human Connectome Data for Secondary Analysis

NOT-MH-21-175
Notice of Special Interest (NOSI) regarding the Use of Human Connectome Data for Secondary Analysis

PAR-21-092
NIDA Translational Avant-Garde Award for Development of Medication to Treat Substance Use Disorders (UG3/UH3 Clinical Trial Optional)

NOT-OD-21-044
Notice of Intent to Publish a Funding Opportunity Announcement for Maximizing the Scientific Value of Existing Biospecimen Collections (R21 Clinical Trial Not Allowed)

NOT-OD-21-045
Notice of Intent to Publish a Funding Opportunity Announcement for Secondary Analyses of Existing Datasets of Tobacco Use and Health (R21 Clinical Trial Not Allowed)

PAR-21-100
Music and Health: Understanding And Developing Music Medicine (R01 Clinical Trial Optional)

PAR-21-099
Music and Health: Understanding And Developing Music Medicine (R21 Clinical Trial Optional)

RFA-AA-21-001
Improving Health Disparities in Alcohol Health Services (R01 Clinical Trial Optional)

CAR Member New Publications

“Cultural Consensus Modeling to Understand South African Adolescent Girls' Attitudes, Awareness, and Uptake of Dual Protection Strategies” Jennifer L. Brown, Ph.D., Lochner Marais, Ph.D., Carla Sharp, Ph.D., Jan Cloete, M.Soc.Sci., Molefi Lenka, Kholisa Rani, M.A., Philile Marime, Irene Ditlhare, Refuwe Moqolo, Disebo Peterson, and Jessica M. Sales, PhD

ABSTRACT

Purpose: This study used cultural consensus modeling to elucidate culturally relevant factors associated with dual protection use (strategies to prevent both pregnancy and sexually transmitted infection [STI]/HIV) among South African adolescent girls aged 14e17 years.

Methods: In Phase 1, participants (N=50) completed a free-listing survey assessing pregnancy and STI/HIV methods used by peers. In Phase 2, participants (N=100) completed a rating survey to examine perceived peer acceptability of Phase 1 pregnancy and STI/HIV prevention methods. In Phase 3, qualitative individual interviews (N=25) gathered in-depth information regarding the cultural acceptability of pregnancy and STI/HIV prevention strategies. In Phase 4, participants (N=300) completed the Phase 2 rating survey for individual beliefs regarding the acceptability of pregnancy and STI/HIV prevention methods.

Results: In Phase 1, 41 pregnancy and 29 STI/HIV prevention strategies, along with 16 factors influencing pregnancy prevention method acceptability were endorsed; male condoms were the most commonly endorsed pregnancy and STI/HIV prevention method. In Phase 2, using cultural consensus analysis, participants were consistent in the perceived acceptability of pregnancy and STI/HIV prevention methods (73.4% variance accounted for in single cultural model). In Phase 3, qualitative findings provided in-depth information regarding factors influencing commonly used pregnancy (e.g., injectable contraception) and STI/HIV (e.g., condoms) prevention methods. In Phase 4, a single cultural model was identified (56.3% variance accounted for), with similar acceptability ratings as Phase 2.

Conclusions: A singular cultural model of pregnancy and STI/HIV prevention method acceptability was observed, with little awareness of dual protection. The findings highlight cultural factors for future culturally tailored dual protection interventions for South African adolescent girls.

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