Welcome to the weekly newsletter from the Center for Addiction Research! Each newsletter includes highlights from addiction in the news topics, active funding opportunities offered by NIDA/NIAAA, and information about any new publications from CAR members. Please email Jen Rowe (roweji@ucmail.uc.edu) to change your communication preferences. Thank you.

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."



UC/ Regional News

OneOhio Recovery Foundation Board's April public meeting highlights ongoing work to distribute up to \$51M for addiction prevention, recovery efforts

The OneOhio Recovery Foundation, a 501(c)(3) charitable organization charged with helping distribute Ohio's opioid settlement funds to advance substance use prevention, treatment and recovery efforts, held its monthly public meeting on April 10, at the Ohio Chamber of Commerce offices in Columbus. Opening the meeting, Chair Don Mason (Region 12) noted the opening of the Foundation's first-ever application process on April 2, set to award as much as \$51 million dollars this year to support addiction prevention and recovery efforts across the state. "The grant application window is open through May 3 and we encourage all interested parties to access the OneOhio Grant Portal to submit their applications, as well...

Tobacco control comes up short in state budget, while anti-vaping law could increase smoking

FRANKFORT — In a year when the American Cancer Society asked the Kentucky legislature to increase spending on tobacco prevention, lawmakers cut it and passed an anti-vaping bill that some say could increase cigarette use in the state. The two-year state budget's allocation for tobacco prevention — about \$8 million shy of advocates' ask — "certainly is not" enough to combat use in the state, said Doug Hogan, the government relations director in Kentucky for the American Cancer Society and the Cancer Action Network. The cancer society and others — including the Kentucky Hospital Association, Foundation for a Healthy Kentucky and the Kentucky Chamber of Commerce — signed onto a letter in...

National News

Two-drug combo curbs drinking for people battling severe alcoholism

A combo of an allergy drug and a blood pressure med appears to lower daily drinking in folks battling severe alcoholism, French researchers report. The two generic drugs are the antihistamine cyproheptadine and prazosin, which treats high blood pressure and urinary urgency, noted a team led by Henri-Jean Aubin, of the Université Paris-Saclay in Villejuif. Aubin's group thought the drug duo might work against alcohol use disorder because cyproheptadine works on brain cell receptors linked to impulsive behaviors, while prazosin targets receptors associated with cravings. Speaking in an American...

Pandemic drinking hit middle-aged women hardest, study finds

Middle-aged women experienced increases in alcohol-related health complications during the COVID-19 pandemic, according to new research led by a University of Pittsburgh physician-scientist and published today in JAMA Health Forum. The scientists say the research raises alarm bells indicating the need for immediate public health and clinical interventions to reverse the trends, including urgent communication about the risks of alcohol use. "Even though alcohol-related deaths are higher among men than women, the rate of change has increased faster among women compared to men over...

Electronic health records unlock genetics of tobacco use disorder

By analyzing electronic health records, researchers at the University of California San Diego School of Medicine have identified hundreds of new genes associated with tobacco use disorder. They also identified hundreds of potential drug candidates that could help treat the disease. The study was published in Nature Human Behavior. "Tobacco use disorder has an enormous impact on public health," said Sandra Sanchez-Roige, Ph.D., an associate professor in the Department of Psychiatry at UC San Diego School of Medicine. "However, it's challenging to develop new therapeutics for tobacco use disorder because...

Health care providers should talk with adult smokers about relative risks of tobacco products, including e-cigarettes

Health care providers who are working with adult patients struggling to stop smoking should consider discussing e-cigarettes as a potential tool if they've already tried FDA-approved medications, say tobacco researchers with MUSC Hollings Cancer Center. Benjamin Toll, Ph.D., director of the MUSC Health Tobacco Treatment Program, and Tracy Smith, Ph.D., associate professor in the Addiction Sciences Division of the Department of Psychiatry and Behavioral Sciences, partnered with Brian King, Ph.D., director of the Center for Tobacco Products at the U.S. Food and Drug Administration, to write a commentary...

Bill to phase out smoking advances in UK parliament

A contentious bill that aims to eventually phase out smoking in Britain advanced in parliament on Tuesday, as the House of Commons voted in favor of the controversial measure. The bill would ban the selling of tobacco products to anyone born after January 1, 2009—effectively raising the smoking age by a year each year until it applies to the whole population. The UK parliament kicked off debate on Prime Minister Rishi Sunak's planned flagship legislation on Tuesday, despite opposition from many in his own Conservative Party. "This has the potential to phase out smoking in young people almost...

From opioid overdose to treatment initiation: Outcomes associated with peer support in emergency departments

People with a nonfatal opioid overdose who have access to a peer support program while in the emergency department are more likely to initiate treatment and less likely to have repeated overdoses, according to a Rutgers Health study. The study is the largest study on outcomes associated with emergency department-based peer support for opioid use disorders and was published in JAMA Network Open online ahead of print in the April 2024 issue. According to the Centers for Disease Control and Prevention, nonfatal drug overdoses are treated in emergency departments, which historically have stabilized...

Some hospitals are changing their response when babies are born exposed to drugs

Kirsten Puccio gave birth to her daughter in August 2020. It was a moment she had both eagerly awaited and dreaded for months. Upon delivery, Puccio's doctors were legally mandated to report her to the Massachusetts Department of Children and Families for child abuse and neglect because she was taking methadone, a medication prescribed by her doctor to aid in her recovery from an opioid use disorder. Puccio had known this would happen. She had gotten prenatal care at a clinic that specialized in treating pregnant people with substance use disorders, and workers there had warned her about...

Researchers shed light on the molecular causes of different functions of opioid receptors

Thousands of people around the world die every day from overdoses involving opioids such as fentanyl. Drugs that target opioid receptors sometimes have severe side effects. An international team of researchers has taken a closer look at the molecular mechanisms of these active substances. The research, carried out by Dr Matthias Elgeti, a biophysicist at Leipzig University, in collaboration with research groups from the US and China, has now been published in the journal Nature. Opioid receptors are of great pharmacological interest because opioid substances regulate the perception of pain. "Our findings...

More kids are dying of drug overdoses: Could pediatricians do more to help?

A 17-year-old boy with shaggy blond hair stepped onto the scale at Tri-River Family Health Center in Uxbridge, Massachusetts. After he was weighed, he headed for an exam room decorated with decals of planets and cartoon characters. A nurse checked his blood pressure. A pediatrician asked about school, home life, and his friendships. This seemed like a routine teen checkup, the kind that happens in thousands of pediatric practices across the U.S. every day—until the doctor popped his next question. "Any cravings for opioids at all?" asked pediatrician Safdar Medina. The patient shook his head. "None, not at all?" Medina...

New data identifies trends in accidental opioid overdoses in children

The US saw a 22% decline in rates of prescription-opioid overdose related emergency department (ED) visits in children 17 and younger between 2008 and 2019, but an uptick in the early part of the COVID-19 pandemic, according to a new study published this week in the open-access journal PLOS ONE by Henry Xiang of Nationwide Children's Hospital, US, and colleagues. The authors also note that rates of pediatric opioid overdoses remain high in many populations. Opioid overdose has been declared a public health emergency in the United States but much of the focus has been on adults. In the new study...

Opioid settlement cash being used for existing programs and salaries, sparking complaints

State and local governments are receiving billions of dollars in opioid settlements to address the drug crisis that has ravaged America for decades. But instead of spending the money on new addiction treatment and prevention services they couldn't afford before, some jurisdictions are using it to replace existing funding and stretch tight budgets. Scott County, Indiana, for example, has spent more than \$250,000 of opioid settlement dollars on salaries for its health director and emergency medical services staff. The money usually budgeted for those salaries was freed to buy an ambulance and create a financial cushion...

Q&A: Can weight loss drugs help in addiction treatment?

In recent years, the popularity of drugs like Ozempic and Wegovy has skyrocketed. While this new class of drugs, called GLP-1 receptor agonist drugs, are approved for use in diabetes and for weight loss, researchers have found that they might help with other conditions too, like cardiovascular disease and addiction. They've made such a splash that the journal Science named GLP-1 drugs the 2023 Breakthrough of the Year. Among those investigating the potential of GLP-1 drugs for the treatment of addiction are Patricia "Sue" Grigson, professor and chair of the department of neural and behavioral sciences at Penn...

A quarter of deaths among young adults in Canada were opioid related in 2021: Study

Premature deaths related to opioids doubled between 2019 and 2021 across Canada, with more than 1 in 4 deaths among young adults aged 20–39 years attributable to opioids, according to new research published in CMAJ (Canadian Medical Association Journal). Opioid-related deaths have continued to increase over the past decade across Canada, with 6222 deaths occurring in 2021. This trend worsened during the COVID-19 pandemic, although the scale and rapidity of increases varied across provinces and territories. These changes have been attributed primarily to the unregulated drug supply, which became...

Mexico, a leading producer of illicit fentanyl, can't get enough for medical use, study finds

A report released by the Mexican government Friday says the country is facing a dire shortage of fentanyl for medical use, even as Mexican cartels pump out tons of the illicit narcotic. The paradox was reported in a study by Mexico's National Commission on Mental Health and Addictions. The study did not give a reason for the shortage of the synthetic opioid, which is needed for anesthesia in hospitals, but claimed it was a worldwide problem. The commission said fentanyl had to be imported, and that imports fell by more than 50% between 2022 and 2023. Nonetheless, Mexican cartels appear to be having no problem importing...

Small gift cards can be a key tool to stop stimulant addiction, but stigma stands in the way

Clyde Davis battled a methamphetamine and heroin addiction for over nine years. He tried various treatment programs, but none worked for him before he reached his insurance maximum and was forced to discharge. "I was trying to die; just putting myself through torture because I didn't feel like I deserved to live and be happy," Davis said. Then three years ago, he became one of the first participants in a new contingency management program at the Rimrock Foundation, Montana's oldest nonprofit addiction treatment center. Contingency management uses positive reinforcement as a behavioral...

What Patients Should Know Before Agreeing to Psychedelic Therapy

Rapidly expanding support for psychedelic agents in mental health treatment has introduced unique challenges and essential considerations in the design and implementation of informed consent processes, an analysis concluded. A review of publicly available psychedelic research-oriented documents identified seven overlooked or underemphasized elements to address in future psychedelicinformed consent processes, Mason Marks, MD, JD, of Harvard Law School in Cambridge, Massachusetts, and colleagues wrote in a special communication in JAMA Psychiatry. These include: Acute and chronic...

Funding Opportunities



GRANTS & FUNDING NIH Central Resource for Grants and Funding Information

RFA-DA-25-035

Using Neuromodulation to Characterize the Continuum of Pathophysiology Between Substance Use and Mental Health Disorders (R01 Clinical Trial Required)

NOT-DA-24-026

Notice of Change to Application Due Date for PAR-24-062, "Phased Research to Support Substance Use Epidemiology, Prevention, and Services Studies (R61/R33 Clinical Trials Optional)"

PAR-24-197

HEAL Initiative-Early-Stage Discovery of New Pain Targets Within the Understudied Druggable Proteome (R03 Clinical Trial Not Allowed)

CAR Member New Publications

Influence of Eat, Sleep, and Console on Infants Pharmacologically Treated for **Opioid Withdrawal**

A Post Hoc Subgroup Analysis of the ESC-NOW Randomized Clinical Trial Lori A. Devlin, DO; Zhuopei Hu, MS; Stephanie L. Merhar, MD; Songthip T. Ounpraseuth, PhD; Alan E. Simon, MD; Jeannette Y. Lee, PhD; Abhik Das, PhD; Margaret M. Crawford, BS; Rachel G. Greenberg, MD; P. Brian Smith, MD; Rosemary D. Higgins, MD; Michele C. Walsh, MD; Ward Rice, MD, PhD; David A. Paul, MD; Jessie R. Maxwell, MD; Camille M. Fung, MD; Tanner Wright, MD; Julie Ross, MD; Jennifer M. McAllister, MD; Moira Crowley, MD; Sophie K. Shaikh, MD; Lori Christ, MD; Jaime Brown, MD; Julie Riccio, MD; Kara Wong Ramsey, MD; Erica F. Braswell, MD; Lauren Tucker, MD; Karen McAlmon, MD; Krishna Dummula, MD; Julie Weiner, DO; Jessica R. White, MD; Sarah Newman, APRN; Jessica N. Snowden, MD; Leslie W. Young, MD; for the Eunice Kennedy Shriver NICHD Neonatal Research Network and NIH Environmental Influences on Child Health Outcomes (ECHO) Program Institutional **Development Award States Pediatric Clinical Trials Network**

JAMA Pediatrics

DOI: https://doi.org/10.1001/jamapediatrics.2024.0544

ABSTRACT

Importance: The function-based eat, sleep, console (ESC) care approach substantially reduces the proportion of infants who receive pharmacologic treatment for neonatal opioid withdrawal syndrome (NOWS). This reduction has led to concerns for increased postnatal

opioid exposure in infants who receive pharmacologic treatment. However, the effect of the ESC care approach on hospital outcomes for infants pharmacologically treated for NOWS is currently unknown.

Objective: To evaluate differences in opioid exposure and total length of hospital stay (LOS) for pharmacologically treated infants managed with the ESC care approach vs usual care with the Finnegan tool.

Design, Setting, and Participants: This post hoc subgroup analysis involved infants pharmacologically treated in ESC-NOW, a stepped-wedge cluster randomized clinical trial conducted at 26 US hospitals. Hospitals maintained pretrial practices for pharmacologic treatment, including opioid type, scheduled opioid dosing, and use of adjuvant medications. Infants were born at 36 weeks' gestation or later, had evidence of antenatal opioid exposure, and received opioid treatment for NOWS between September 2020 and March 2022. Data were analyzed from November 2022 to January 2024.

Exposure: Opioid treatment for NOWS and the ESC care approach.

Main Outcomes and Measures: For each outcome (total opioid exposure, peak opioid dose, time from birth to initiation of first opioid dose, length of opioid treatment, and LOS), we used generalized linear mixed models to adjust for the stepped-wedge design and maternal and infant characteristics.

Results: In the ESC-NOW trial, 463 of 1305 infants were pharmacologically treated (143/603 [23.7%] in the ESC care approach group and 320/702 [45.6%] in the usual care group). Mean total opioid exposure was lower in the ESC care approach group with an absolute difference of 4.1 morphine milligram equivalents per kilogram (MME/kg) (95% CI, 1.3-7.0) when compared with usual care (4.8 MME/kg vs 8.9 MME/kg, respectively; P = .001). Mean time from birth to initiation of pharmacologic treatment was 22.4 hours (95% CI, 7.1-37.7) longer with the ESC care approach vs usual care (75.4 vs 53.0 hours, respectively; P = .002). No significant difference in mean peak opioid dose was observed between groups (ESC care approach, 0.147 MME/kg, vs usual care, 0.126 MME/kg). The mean length of treatment was 6.3 days shorter (95% CI, 3.0-9.6) in the ESC care approach group vs usual care group (11.8 vs 18.1 days, respectively; P < .001), and mean LOS was 6.2 days shorter (95% CI, 3.0-9.4) with the ESC care approach than with usual care (16.7 vs 22.9 days, respectively; P < .001).

Conclusions and Relevance: When compared with usual care, the ESC care approach was associated with less opioid exposure and shorter LOS for infants pharmacologically treated for NOWS. The ESC care approach was not associated with a higher peak opioid dose, although pharmacologic treatment was typically initiated later.

Trial Registration: ClinicalTrials.gov Identifier: NCT04057820.

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