NIAAASPECTRUM

Volume 14, Issue 1 | Winter 2022 | https://www.spectrum.niaaa.nih.gov

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES • National Institutes of Health • National Institute on Alcohol Abuse and Alcoholism

FEATURE

WORDS MATTER WHEN DISCUSSING ALCOHOL ISSUES: A NEW STIGMA-FREE VOCABULARY FOR BETTER AUD OUTCOMES



Word choice may seem out of place among the myriad factors that can influence outcomes for a complex condition like alcohol use disorder (AUD). In fact, the stigma created by the language that is used to describe alcohol problems

can decrease many people's willingness to seek help for alcohol problems. It also can affect how people with AUD are treated in all aspects of life.

"Stigmas are the negative attitudes toward people that are based on certain distinguishing characteristics," says National Institute on Alcohol Abuse and Alcoholism (NIAAA) Director George F. Koob, Ph.D. "More than a decade of research has shown that stigma contributes significantly to negative health outcomes and can pose a barrier to seeking treatment for mental illness or substance use disorders."

In the United States, nearly 90 percent of people with substance use disorders and 35 percent of people with serious mental illness do not receive treatment. In a recent article published in *Neuropsychopharmacology*, National Institute on Drug Abuse Director Nora D. Volkow, M.D.; National Institute of Mental Health Director Joshua Gordon, M.D., Ph.D.; and Dr. Koob discuss how people with a mental illness or substance use disorder who experience stigma may begin to internalize it, leading to lower self-esteem, decreased interest in seeking help, and worsening of their symptoms. The researchers also point to evidence that stigma-related bias among clinicians can contribute to a treatment-averse mindset and to flawed clinical care, including failure to implement proven methods of treatment. Studies have shown that using scientifically accurate language and terms that centralize the experience

IN THIS ISSUE

FEATURE



1 Words Matter When Discussing Alcohol Issues: A New Stigma-Free Vocabulary for Better AUD Outcomes

NEWS FROM THE FIELD



3 Study Suggests
Possible Dietary
Treatment for Alcohol
Withdrawal Symptoms

SPOTLIGHT



4 Pandemic Underscores Value of Telehealth Options for AUD Treatment



5 American Heart Month—Another Opportunity To Examine Your Relationship With Alcohol

NOTEWORTHY



6 Williams-Simmons Appointed as NIAAA Associate Director for Basic Research



7 NIAAA's *Alcohol* and Your Pregnancy Brochure Now Available

of patients with mental illness and substance use disorders is one key component to reducing stigma. Such efforts can improve how people with these conditions are treated in healthcare settings as well as throughout society.



"Although more evidence-based treatment options for AUD are available today than ever before, stigma is a factor that prevents some people from reaching out for help and from being treated with dignity," says Dr. Koob. "Understanding that AUD is a medical condition and choosing our words carefully when discussing alcohol-related problems are important steps toward changing the conversation and reducing stigma around AUD."

Dr. Koob explains that we can help alleviate the stigma associated with alcohol-related conditions by consistently using non-pejorative, non-stigmatizing, person-first language to describe these conditions and the people who are affected by them. Some words that are commonly used in society, such as "alcoholic" and "alcohol abuse," can be stigmatizing.

Some Recommended Language for Reducing Alcohol-Related Stigma

When discussing alcohol-related issues, use these terms to help reduce stigma:

- Alcohol use disorder instead of *alcohol abuse*, *alcohol dependence*, and *alcoholism*. In their recent article in *Neuropsychopharmacology*, Dr. Koob and his co-authors noted that the term "abuse" remains in the names of National Institutes of Health (NIH) Institutes that study addiction. They added that there is increased interest—both in the scientific community as well as among the affected patient populations—in seeing those names changed to reflect current understandings of addiction as a treatable disorder.
- Alcohol misuse instead of *alcohol abuse* when referring broadly to drinking in a manner, situation, amount, or frequency that could cause harm to the person who is engaging in drinking or to those around that person. For some individuals, any alcohol use constitutes alcohol misuse.
- **Person-first language** to describe people with alcohol-related problems such as:
 - o **Person with alcohol use disorder** instead of alcoholic or addict
 - Person in recovery or person in recovery from alcohol use disorder instead of recovering alcoholic
 - Person who misuses alcohol or person who engages in alcohol misuse instead of alcohol abuser and drunk
- Alcohol-associated liver disease instead of *alcoholic liver disease*. The use of "alcoholic" as an adjective may perpetuate stigma for people with alcohol-associated liver disease and other alcohol-related health conditions.
- Alcohol-associated hepatitis, alcohol-associated cirrhosis, and alcohol-associated pancreatitis instead of alcoholic hepatitis, alcoholic cirrhosis, and alcoholic pancreatitis.

To learn more about how the language we choose can help reduce alcohol-related stigma, please visit NIAAA's <u>Words Matter web page</u>. And while all NIAAA materials reflect the "Words Matter" concepts, the <u>NIAAA Alcohol Treatment Navigator</u> provides a one-stop resource for learning about AUD and its treatment. The Navigator also shows people how to recognize high-quality treatment providers and how to search several national directories of treatment programs and specialists.

References:

Kelly, J.F.; Saitz, R.D.; and Wakeman, S. Language, substance use disorders, and policy: The need to reach consensus on an "addiction-ary." Alcoholism Treatment Quarterly 34(1): 116–123, 2016. https://doi.org/10.1080/07347324.2016.1113103

Kelly, J.F.; and Westerhoff, C.M. Does it matter how we refer to individuals with substance-related conditions? A randomized study of two commonly used terms. *International Journal of Drug Policy* 21(3):202–207, 2010. PMID: 20005692

Volkow, N.D.; Gordon, J.A.; and Koob, G.F. Choosing appropriate language to reduce the stigma around mental illness and substance use disorders. Neuropsychopharmacology 46(13):2230–2232, 2021. PMID: 34276051

Han, B. Key Substance Use and Mental Health Indicators in the United States: Results From the 2019 National Survey on Drug Use and Health (HHS Publication No. PEP20-07-01-001, NSDUH Series H-55). Rockville, MD: Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration; 2020. https://www.samhsa.gov/data/sites/default/files/reports/rpt29393/2019NSDUHFFRPDFWHTML/2019NSDUHFFR090120.htm. Accessed January 13, 2022.

Thornicroft, G.; Rose, D.; and Mehta, N. (2010). Discrimination against people with mental illness: What can psychiatrists do? Advances in Psychiatric Treatment 16:53–59, 2010. https://doi.org/10.1192/apt.bp.107.004481



NEWS FROM THE FIELD

STUDY SUGGESTS POSSIBLE DIETARY TREATMENT FOR ALCOHOL WITHDRAWAL SYMPTOMS



A diet high in fat and low in carbohydrates and protein, known as a ketogenic diet, may help reduce the severity of alcohol withdrawal symptoms in people being treated for alcohol use disorder (AUD), according to a new study led by researchers at the National Institute on Alcohol Abuse and Alcoholism (NIAAA) and the National Institute on Drug Abuse (NIDA). This study also showed that a history of a ketogenic diet reduced alcohol drinking in an animal model of AUD. A report of the study, led by Corinde Wiers, Ph.D., of the NIAAA Laboratory of Neuroimaging, and Leandro F. Vendruscolo, Pharm.D., Ph.D., of the NIDA Neurobiology of

Addiction Section, with extramural and National Institutes of Health (NIH) colleagues including NIAAA Director George F. Koob, Ph.D., and NIDA Director Nora Volkow, M.D., appears in *Science Advances*.

The distressing symptoms of alcohol withdrawal are thought to perpetuate alcohol drinking and to contribute to relapse. As Dr. Wiers and colleagues noted in their paper, previous research has shown that chronic alcohol drinking increases the brain's use of acetate—a metabolite of alcohol—and related compounds known as ketone bodies. During withdrawal, acetate levels decrease. This reduction is thought to contribute to alcohol withdrawal and even neurotoxicity. As a result, Dr. Wiers and colleagues hypothesized that increasing brain ketone bodies, including acetoacetate, via a ketogenic diet might dampen the effect of the withdrawal-related shift in brain metabolism. Ketogenic diets, which are high in fats, moderate in protein, and low in carbohydrates, increase ketone bodies and provide the brain with an alternative source of energy than glucose.

In the current study, the researchers found that participants with AUD who received the ketogenic diet required less medication to treat alcohol withdrawal symptoms during the first week of detoxification compared to participants with AUD who received a standard American diet. Over a 3-week treatment period, the ketogenic diet group also had reduced alcohol craving compared to the standard American diet group.

In a parallel, preclinical experiment conducted with a rat model of AUD, the researchers demonstrated that rats fed a regular diet escalated their alcohol consumption during acute withdrawal. However, rats made dependent on alcohol that were fed a ketogenic diet and later switched back to a regular diet did not escalate alcohol consumption and instead maintained alcohol intake at the levels of rats not made dependent on alcohol.

Taken together, these findings point to the potential of a diet-based aid to treatment for AUD.

Reference:

Wiers, C.E.; Vendruscolo, L.F.; van der Veen, J.W.; Manza, P.; Shokri-Kojori, E.; Kroll, D.S.; Feldman, D.E.; McPherson, K.L.; Biesecker, C.L.; Zhang, R.; Herman, K.; Elvig, S.K.; Vendruscolo, J.C.M.; Turner, S.A.; Yang, S.; Schwandt, M.; Tomasi, D.; Cervenka, M.C.; Fink-Jensen, A.; Benveniste, H.; Diazgranados, N.; Wang, G.J.; Koob, G.F.; and Volkow, N.D. Ketogenic diet reduces alcohol withdrawal symptoms in humans and alcohol intake in rodents. Science Advances 7(15):eabf6780, 2021. PMID: 33837086



SPOTLIGHT

PANDEMIC UNDERSCORES VALUE OF TELEHEALTH OPTIONS FOR AUD TREATMENT



The need for physical distancing during the COVID-19 pandemic ushered in an expansion in the use of technologies to minimize person-to-person contact. The healthcare industry in particular saw a rapid growth of measures, collectively known as telehealth or telemedicine, to provide care and facilitate interactions between providers and patients. Telehealth encompasses a wide range of approaches. Its defining feature is that the visits are done remotely using technologies that may range from telephone and video calls to diverse internet-based platforms.

According to the Substance Abuse and Mental Health Services Administration (SAMHSA), telehealth has been used in clinical settings for more than 60 years. Between 2016 and 2019, the use of telehealth doubled from about 14 percent to about 28 percent. During the same period, the proportion of treatment facilities for alcohol and other substance use disorders that offered telehealth increased from about 14 percent to about 17 percent.

Telehealth use overall has accelerated rapidly during the COVID-19 pandemic. A study by the Rand Corporation reported a greater than twentyfold increase in the use of telemedicine after March 2020 among a large sample of people with employer-based health coverage. Other investigators have reported that, while fewer than 1 percent of visits for mental health and/or substance use disorder were delivered via telemedicine prior to the pandemic, 41 percent of such visits were conducted via telemedicine by early October 2020.

Prior to—and since—the pandemic, the National Institute on Alcohol Abuse and Alcoholism (NIAAA) has supported a variety of telehealth research projects, including:

- Alcohol Screening, Brief Intervention and Referral to Treatment (SBIRT) with clinicians by phone or video chat
- Cognitive behavioral therapy (CBT) with a clinician or a self-guided approach called CBT4CBT
- Telehealth to address post-traumatic stress disorder (PTSD) and alcohol misuse following sexual assault
- Videoconferencing-based motivational interviewing for alcohol misuse and medication adherence in patients living with HIV

In a recent <u>NIAAA Director's Blog post</u>, George F. Koob, Ph.D., noted the "profound implications" that physical distancing has for access to treatment services for those with alcohol problems. He noted that people currently in recovery or those who need help may benefit from telehealth and online support group meetings. The <u>NIAAA Alcohol Treatment Navigator</u> can guide visitors directly to <u>telehealth-related treatment resources</u>, <u>online mutual support groups</u>, and other resources.

NIAAASPECTRUM

References:

SAMHSA. Telehealth for the Treatment of Serious Mental Illness and Substance Use Disorders. SAMHSA Publication No. PEP21-06-02-001. Rockville, MD: National Mental Health and Substance Use Policy Laboratory, SAMHSA, 2021. https://store.samhsa.gov/sites/default/files/SAMHSA_Digital_Download/PEP21-06-02-001.pdf. Accessed January 10, 2022.

Connolly, S.L.; Stolzmann, K.L.; Heyworth, L.; Weaver, K.R.; Bauer, M.S.; and Miller, C.J. Rapid increase in telemental health within the Department of Veterans Affairs during the COVID-19 pandemic. *Telemedicine Journal and e-Health: The Official Journal of the American Telemedicine Association* 27(4), 454–458, 2021. PMID: 32926664

Uscher-Pines, L.; Cantor, J.; Huskamp, H.A.; Mehrotra, A.; Busch, A.; and Barnett, M. Adoption of telemedicine services by substance abuse treatment facilities in the U.S. Journal of Substance Abuse Treatment 117, 108060, 2020. PMID: 32811631

Busch, A.B.; Sugarman, D.E.; Horvitz, L.E.; and Greenfield, S.F. Telemedicine for treating mental health and substance use disorders: Reflections since the pandemic. Neuropsychopharmacology 46, 1068–1070, 2021. PMID: 33479513

Cantor, J.H.; McBain, R.H.; Pera, M.F.; Bravata, D.M.; and Whaley, C.M. Who is (and is not) receiving telemedicine care during the COVID-19 pandemic. *American Journal of Preventive Medicine* 61(3), 434–438, 2021. PMID: 33781622

SPOTLIGHT

AMERICAN HEART MONTH—ANOTHER OPPORTUNITY TO EXAMINE YOUR RELATIONSHIP WITH ALCOHOL



February, which is <u>American Heart Month</u> and includes Valentine's Day, serves as a good time to review the ways that alcohol misuse can damage a most vital organ—the heart.

Research has demonstrated that <u>long-term heavy drinking</u> <u>weakens the heart muscle</u>, causing a disease called alcoholassociated cardiomyopathy, in which the left ventricle of the weakened heart dilates, stretches out, and cannot contract effectively. Consequently, <u>the heart cannot pump sufficiently</u>, impairing the supply of blood and oxygen within the body (known as ischemia). This impaired blood flow can cause severe organ and tissue damage and can even lead to heart

failure. The symptoms of alcohol-associated cardiomyopathy include shortness of breath, fatigue, swollen legs and feet, and irregular heartbeat.

Alcohol misuse can also lead to high blood pressure (also called hypertension). Heavy alcohol consumption triggers the release of certain stress hormones that constrict blood vessels and elevate blood pressure. In addition, alcohol may affect the function of the muscles within the blood vessels, another factor associated with hypertension.

Research has shown that acute alcohol misuse, such as binge drinking, as well as long-term alcohol misuse can <u>affect how quickly the heart beats</u>. The heart depends on an internal pacemaker system to keep it pumping consistently and at the right speed. Alcohol can disturb this pacemaker system, causing arrythmia, a condition in which the heart beats too rapidly, or irregularly.

Alcohol misuse is also associated with atrial fibrillation (AF). According to the National Heart, Lung, and Blood Institute (NHLBI), AF causes the heart to beat faster than normal, leading to heart palpitations, chest pain, or fatigue. In a study of 100 patients diagnosed with AF, the likelihood of an episode of AF increased for several hours after alcohol consumption. In another study of patients with AF, abstaining from alcohol decreased the incidence of AF compared to a control group.

NIAAASPECTRUM

National Institute on Alcohol Abuse and Alcoholism-supported research will continue to investigate the pernicious damage of alcohol misuse on the heart. Meanwhile, American Heart Month is another opportunity to examine your relationship with alcohol. For tips and strategies for making a change, see <u>Rethinking Drinking</u>. <u>Materials for American Heart Month</u> are available through NHLBI.

References:

Piano, M.R. Alcohol's effects on the cardiovascular system. Alcohol Research: Current Reviews 38(2):219-241, 2017. PMID: 28988575

Cleveland Clinic. Alcoholic Cardiomyopathy. Available at: https://my.clevelandclinic.org/health/diseases/21994-alcoholic-cardiomyopathy. Accessed January 20, 2022.

Day, E.; and Rudd, J.H.F. Alcohol use disorders and the heart. Addiction. 114(9):1670-1678, 2019. Epub 2019 Jul 15. PMID: 31309639.

Farinelli, L.A.; Piacentino, D.; Browning, B.D.; Brewer, B.B.; and Leggio, L. Cardiovascular consequences of excessive alcohol drinking via electrocardiogram: A systematic review. *Journal of Addictions Nursing* 32(1):39–45, 2021. PMID: 33646717

Voskoboinik, A; Kalman, J.M.; De Silva, A.; Nicholls, T.; Costello, B.; Nanayakkara, S.; Prabhu, S.; Stub, D.; Azzopardi, S.; Vizi, D.; Wong, G.; Nalliah, C.; Sugumar, H.; Wong, M.; Kotschet, E.; Kaye, D.; Taylor, A.J.; and Kistler, P.M. Alcohol abstinence in drinkers with atrial fibrillation. New England Journal of Medicine 382(1):20–28, 2020. PMID: 31893513

NHLBI. Atrial Fibrillation. Available at: https://www.nhlbi.nih.gov/health-topics/atrial-fibrillation. Accessed October 18, 2021.

Marcus, G.M.; Vittinghoff, E.; Whitman, I.R.; Joyce, S.; Yang, V.; Nah, G.; Gerstenfeld, E.P.; Moss, J.D.; Lee, R.J.; Lee, B.K.; Tseng, Z.H.; Vedantham, V.; Olgin, J.E.; Scheinman, M.M.; Hsia, H.; Gladstone, R.; Fan, S.; Lee, E.; Fang, C.; Ogomori, K.; Fatch, R.; and Hahn, J.A. Acute consumption of alcohol and discrete atrial fibrillation events. *Annals of Internal Medicine* 174(11):1503–1509, 2021. Epub 2021 Aug 31. PMID: 34461028

NOTEWORTHY

WILLIAMS-SIMMONS APPOINTED AS NIAAA ASSOCIATE DIRECTOR FOR BASIC RESEARCH



Bridget Williams-Simmons, Ph.D., has been appointed Associate Director for Basic Research at the National Institute on Alcohol Abuse and Alcoholism (NIAAA). Dr. Williams-Simmons serves in this new role in addition to continuing as Director of the NIAAA Office of Science Policy and Communications (OSPC).

Prior to being appointed to the dual role of Associate Director for Basic Research and OSPC Director, Dr. Williams-Simmons served as Chief of the NIAAA Science Policy Branch (SPB). She joined NIAAA in 2007 as a Health Scientist Administrator in SPB.

The OSPC Director/Associate Director for Basic Research provides leadership in strategic planning for NIAAA and oversees the Institute's legislative, science

policy, information dissemination, resource development, and outreach programs. Among a broad range of responsibilities, this role involves serving as a scientific advisor to the NIAAA Director on basic research, collaborating with the scientific and alcohol stakeholder communities, and guiding major analyses of basic science programs and other initiatives so that NIAAA is poised to capitalize on emerging opportunities.

Dr. Williams-Simmons states, "I am grateful and humbled for this opportunity to enhance visibility of NIAAA-supported basic research and emphasize its importance as the foundation for improving evidence-based diagnosis, prevention, and treatment of alcohol-related conditions. I am excited about increased collaboration with my NIAAA colleagues, the extramural research community, and our stakeholders in moving this area of research forward as well as enhancing diversity, equity, inclusion, and accessibility, both in terms of shaping our research priorities and cultivating a robust and sustainable biomedical workforce."



NOTEWORTHY

NIAAA'S *ALCOHOL AND YOUR PREGNANCY* BROCHURE NOW AVAILABLE

Developed by the National Institute on Alcohol Abuse and Alcoholism (NIAAA), the *Alcohol and Your Pregnancy* brochure provides answers to frequently asked questions about alcohol and drinking during pregnancy and describes conditions associated with prenatal alcohol exposure.

This brochure was updated in 2021 to include new resources for expectant mothers.

Free copies in **English** and **Spanish** are available through the NIAAA website.



ABOUT US

NIAAA Spectrum is NIAAA's webzine. With engaging feature articles, short news updates, and colorful graphics, NIAAA Spectrum offers accessible and relevant information on NIAAA and the alcohol research field.

CONTACT US

National Institute on Alcohol Abuse and Alcoholism (NIAAA)

Publications Distribution Center P.O. Box 10686, Rockville, MD 20849-0686 888-MY-NIAAA (888-696-4222)



