

Women and Alcohol Use: Why the Differences?

Risky drinking for men under 65 years old is more than four drinks per occasion and more than 14 drinks per week. For women it is more than three drinks per occasion and more than seven per week.

While this may not seem fair there are significant health reasons for the differences which if heeded can greatly improve women's health. Even though women are more likely to be abstainers, drink less, and are less likely to engage in problematic drinking and to develop alcohol related disorders, there are other reasons that this topic deserves our attention.

Despite these facts, it is important to note that alcohol use is not an uncommon occurrence among women. Almost half of adult women say that they have drank alcohol in the past 30

days. Statistics from 2019 show that 32% of female high school students consumed alcohol compared with 26% of male high school students. Binge drinking (consuming four or more drinks per occasion for women) occurs in 13% of adult women and 18% of women of child-bearing age (18 to 44 years of age). While alcohol use is up 14% among the general population during the COVID-19 pandemic, heavy drinking in women has increased by 41%. There are more than 27,000 deaths related to excessive alcohol use among women and girls every year in the United States.

What are the distinctions between men and women that make women more susceptible to the negative effects of alcohol and the amount they can safely drink? Biological differences in chemistry and body structure that lead

see Alcohol pg 6

Symptoms of Alcohol Use Disorder

Healthcare providers use criteria from the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DMS-5) to assess whether a person has Alcohol Use Disorder (AUD) and to determine the severity if present.

Providers might ask the following questions to assess a person's symptoms.

Have you:

- Consumed more drinks than you intended?
- Had difficulty with cutting down or stop drinking?
- Spent too much time drinking and felt sick after?
- Wanted a drink so badly you couldn't think of anything else?
- Found drinking interfered with family time? Job troubles? School problems?
- Continued drinking after disagreeing with family or friends?
- Given up or cut back on activities that were important or interesting to you, or gave you pleasure, in order to drink?
- Canceled on important family and/or friend plans to drink?
- More than once gotten into situations while or after drinking that increased your chances of getting hurt?
- Continued to drink after feeling depressed or anxious, or after other health problems?
- Had to drink much more than you once did to get the effect you wanted?
- Found that when the effects of alcohol wear off, you experienced withdrawal symptoms?

Source: Understanding Alcohol Use Disorder | National Institute on Alcohol Abuse and Alcoholism (NIAAA) (nih.gov)



overview

Women's Health Overview

newsletter is published quarterly for health care professionals and the general public with special interest in women's health issues by the Olson Center for Women's Health.

Address all comments to: Lana Molczyk Olson Center for Women's Health University of Nebraska Medical Center 989450 Nebraska Medical Center Omaha, NE 68198-9450

402.559.6345 | 800.775.2855 ljmolczy@unmc.edu

Women's Health Overview newsletter is available to everyone. If you would like to receive the newsletter free of charge, please contact the Olson Center at 402.559.6345 or e-mail your request to ljmolczy@unmc.edu. If you do not wish to receive the newsletter, please contact us.

An alternative electronic version of the newsletter is available. If you would like to receive this electronic version in addition to the print version, or instead of, please email your request to ljmolczy@unmc.edu.

From the chairman

The Olson Center for Women's Health has sponsored the biennial Breastfeeding: Baby's Natural Choice Conference since its formation in 1995. We are pleased to announce our next event this August. To be certain this one will be different. All our previous meetings have brought local and national experts to Omaha to enlighten and encourage breastfeeding and this one will do the same. This year's conference, thanks to the COVID-19 Pandemic will be virtual. Society has adapted to the pandemic by becoming more virtual and while many of us are a bit weary of interacting with people electronically it does offer us the opportunity to broaden our audience. Virtual conferences have gotten better over time as we have adapted to the technology. We look forward to bringing you our version of an electronic conference in a few weeks.

We are saddened to announce the departure of Dr. Sonja Kinney as the medical director of the Olson Center for Women's Health. She did a superb job in leading the center and we will miss her terribly. It does offer us the opportunity to introduce Dr. Jennifer Griffin as the new medical director. She completed her residency in our department and her fellowship in Breast Disease at the University of Michigan. We look forward to her leadership as we continue to strive to improve the health of women in the region and beyond.

Finally, we are grateful for the participation of Dr. Kenneth Zoucha in this newsletter offering his perspective on alcohol and women. He is an expert in addiction and has been a wonderful addition to the faculty of our medical school as both an educator and a clinician.

As we enter the summer months, please be mindful of the need for social distancing and masking and we urge COVID vaccination for all those without medical contraindications. The progress we have made has been astounding but requires that we continue to listen to our public health experts. Have a great summer and be safe!

Carl V. Smith, MD, FACOG

Come Vogen

Chairman

Department of Obstetrics and Gynecology

College of Medicine

University of Nebraska Medical Center



Alcohol Research Unites UNMC and VA Scientists

Chronic alcohol consumption injures all organs of the body, but the liver, pancreas, digestive tract, lung, and brain sustain the greatest injury from alcohol abuse. There are also gender differences that make women more susceptible to the long-term negative health effects of alcohol compared with men.

Research performed by faculty at UNMC and the Omaha VA Medical Center has an over 50 year history of investigating the biomedical consequences of excessive drinking to gain an understanding of ethanol metabolism through which a broad spectrum of liver diseases develop, such as steatosis, steatohepatitis, and ultimately cirrhosis and hepatocellular carcinoma. United States Veterans have a lifetime prevalence of alcohol abuse that is over two times higher than the non-veteran population. Several of these investigators have dual appointments at UNMC and at the VA Medical Center. Led by a team of accomplished female investigators these projects bring in grants that total close to 3.5 million dollars per year with hopes that a better understanding of the pathogenesis of alcohol-associated organ injury could lead to the development of rational

treatments to manage this disease. An early manifestation of alcohol-induced liver injury is fatty liver disease. The laboratory of Carol A. Casey, PhD, Professor and VA Career Scientist, conducts research on alcohol's harmful effects on protein and lipid droplet trafficking in the liver. Kusum K. Kharbanda, PhD, professor, examines the alcohol-induced alterations in the metabolic pathways in liver, gut and adipose (fatty) tissue that cause the generation of many hallmark features of alcohol-associated liver disease. A goal is to determine the efficacy of "betaine" and its derivatives in the treatment of liver injury. Drs. Terrence M. Donohue, Jr and Paul Thomes study how alcohol consumption impairs the ability of the liver to clear itself of unwanted molecules by a process called autophagy ("self eating").

Chronic alcohol consumption alters the balance of hormones that maintain metabolism of vital tissues in the body. Karuna Rasineni, PhD, conducts studies that explore the role of altered hormones on interactions among the stomach, pancreas, adipose tissue and liver as they relate to the development of alcohol associated fatty liver disease. Saraswathi

Viswanathan, PhD is examining how obesity controls liver and adipose tissue injury in response to alcohol. Alcohol contributes to conditions that cause liver failure and cancer. Natalia A. Osna, MD, PhD, and Murali Ganesan, PhD are studying the interactions between alcohol and viral infections, such as hepatitis B, hepatitis C and HIV. This combination of insults dramatically accelerates the progression of liver disease toward endstage liver disease. They are investigating therapeutic targets for the treatment of viral hepatitis and prevention of liver fibrosis. Benita L. McVicker, PhD, studies the role of alcohol on liver macrophages in potentiating colorectal cancer liver metastasis.

Pneumonia is the leading cause of death in the elderly and alcohol misuse significantly increases the risk for lung infections. Todd A. Wyatt, PhD, researches the impact of alcohol on lung innate defense against microbial pathogens, including SARS-CoV-2, and other environmental exposures such as cigarette smoke.

Contributed by Kusum Kharbanda, Ph.D. and John Davis, Ph.D.

Omaha VA Medical Center and University of Nebraska Medical Center



Wednesday,
August 25, 2021
7:45 a.m. – 4 p.m. CST
Join us virtually!

Registration Fee

\$100 \$0 for Students

Register Online

unmc.edu/cce

Questions?

Email Jackie Farley at jrfarley@unmc.edu

Conference Topics & Speakers

Medication & Alcohol Use and Breastfeeding

Thomas Hale, PhD, R.Ph, Texas Tech University

Practical Tips for Breastfeeding Management:

When the Literature Is Lacking — Which It Practically Always Is Christina Smillie, MD, FAAP, IBCLC, FABM, Breastfeeding Resources

Understanding Gender Diversity

N. Jean Amoura, MD, M.Sc., University of Nebraska Medical Center

From Breastfeeding to Chestfeeding: How to Support LGBTQIA+ Communities

Andrea Leigh Braden, MD, IBCLC, Emory University

Cultural Perspectives and Breastfeeding Panel Discussion

Moderator: Christian Minter, MSLIS, University of Nebraska Medical Center Panelists: Jodi Henry, CLC, Santee Health Center; Dinorah Garcia, CLC, Lincoln Lancaster County Health Department; JueYeZi (Rebecca) Reinhardt, CBE, Asian Community and Cultural Center; Karieta Walker, CLC, Chocolate Life Savers

Cannabis and Breastfeeding

Allison Dering-Anderson, PharmD, RP, FAAIM, FAPhA, University of Nebraska Medical Center

Ready, Set, Teleconsult! Virtual Lactation Support in the Time of COVID

Nekisha Killings, MPH, IBCLC, RLC and Nikki Hunter Greenaway, FNP-C, IBCLC, RLC, Lactation Education Resources

Target Audience

This conference is intended for physicians (OB/GYN, pediatric, and family medicine), nurses, lactation consultants, registered dietitians, medical nutrition therapists, residents, physician assistants, nurse practitioners, nurse midwives, breastfeeding advocates, social workers, and students.

Continuing education will be provided with paid registration.



COVID-19 Vaccination in Lactation: New, Encouraging Data

During the initial COVID-19 vaccine trials, pregnant and lactating individuals were excluded.

When Emergency Use Authorization was granted for COVID-19 vaccines in 2020, experts across the OB/GYN community reviewed the data about how the available vaccines work, the risks of COVID-19 in pregnancy, and the risk profile of the available vaccines. Major organizations issued statements that supported the vaccination of pregnant and lactating individuals as well as those contemplating pregnancy.

As more pregnant and lactating people have received COVID-19 vaccines and have participated in research studies, we continue to learn more about these people's experiences with the COVID-19 vaccine. Regarding lactation, a number of studies have recently been published that provide some promising data:

- No components of the mRNA vaccines (Pfizer-BioNTech and Moderna) appear to enter the breastmilk. Just as with the vast majority of other vaccines, there is no reason to stop breastfeeding or "pump and dump" for any duration of time after receiving the COVID-19 vaccine.
- Being pregnant or breastfeeding does not appear to lessen the immune response to the COVID-19 vaccine. In addition, antibody levels were much higher in vaccinated women than in those who had been infected with COVID-19 during pregnancy.

- Antibodies that a lactating person creates after receiving the COVID-19 vaccine are passed through the breastmilk! This is encouraging because we know that, in other respiratory illnesses, the presence of certain antibodies in breastmilk has been shown to protect babies from being infected. More research is underway to confirm this is also true with COVID-19. Research is also ongoing to determine how long after vaccination antibodies remain in breastmilk. Available data shows that they are present for at least 6 weeks.
- No significant health issues have been identified in the babies of lactating women after these women have received the COVID-19 vaccine. The vast majority of breastfeeding women studied did not identify any significant issues with milk supply after receiving either the Pfizer-BioNTech or Moderna COVID-19 vaccines.

With evidence of potential benefit and no demonstration of harm, the first wave of data about COVID-19 vaccination in lactation is promising. If you have additional questions about the COVID-19 vaccine in lactation, we are happy to answer them!

Contributed by Laura E. Cudzilo, MD UNMC Department of OB-GYN

Article references are available upon request, call the Olson Center at 402.559.6345



Save the Date: October 8, 2021

We are committed to your safety. Due to the COVID-19 pandemic, we will offer a limited number of in-person registrations, and a larger number of virtual registrations.

For information on this hybrid event, call 402.559.6345.

Alcohol continued from pg 6

most women to absorb more alcohol and take longer to metabolize it play a large role in understanding this variance. As a result, after drinking the same amount of alcohol, women tend to have higher blood alcohol levels than men. In addition, the immediate effects of alcohol usually occur more quickly and last longer in women than men. Due to these differences, women are prone to developing the consequences of alcohol use, including alcohol use disorder, more quickly and with less alcohol use than men; a process known as telescoping.

One of the negative consequences of alcohol use in women is liver disease that involves the risk of cirrhosis and other alcohol-related liver diseases. Another of the significant risks for women is the impact that alcohol can have on the brain. Cognitive decline associated with alcohol use, including shrinkage of the brain, develops more quickly. Women who drink excessively are at increased risk for damage to the heart muscle and it occurs at lower levels of drinking and over fewer years. In addition to the cancers found in men associated with alcohol use (mouth, throat, esophagus, liver, and colon) drinking is also associated with breast cancer. Finally, excessive alcohol use, particularly binge drinking, is a major contributing factor to sexual violence.

Childbearing is a very risky time for alcohol use. There is a universal understanding that there is no known safe amount of alcohol use during pregnancy. However, mostly due to untreated alcohol use disorders or other mental health conditions, 10% of women completing a recent survey who were pregnant drank alcohol and 4.5% binge drank. Excessive alcohol use during pregnancy increases the risk of miscarriages, stillbirth, premature delivery, and Sudden Infant Death Syndrome (SIDS). The most significant risk to alcohol use during pregnancy of course is fetal alcohol spectrum disorders (FASD). Fetal alcohol syndrome is the most severe form and is associated with intellectual disabilities and birth defects.

The good news is that we have solid, evidence-based treatment strategies. Treatment IS effective and women can and do live amazing lives of recovery. The American Society of Addiction Medicine outlines a continuum of care that starts with outpatient treatment with a therapist

trained to treat substance use disorders that progresses to inpatient treatment depending on the severity of a person's alcohol use. It is important to note that there are medications that can greatly improve one's chances to attain and maintain recovery that can be prescribed by any provider. Physicians who specialize in the treatment of patients with substance use disorder are available to assist in the recovery process. Sadly, only 1 out of 10 with an alcohol use disorder receive specialized treatment.

Barriers to recovery exist that are specific to women. Fifty-five percent of women said they would feel embarrassment or ashamed if others knew that they had a drinking problem. One-third said they thought others would think less of them if they had received addiction treatment. Women with alcohol addiction who attended treatment stated that they were undeserving of support and help. These and other studies suggest that stigma, while improving, is still a barrier for many to consider treatment for alcohol use. Loss of income, concerns about management of the household, and responsibility for child care (including loss of their children) are also significant barriers to attending treatment. It is the desire to care for their children that can be a strength that is harnessed in helping women to start their recovery journey. The American College of Obstetricians and Gynecologists crafted a policy priority that addresses alcohol use during pregnancy "as a health concern that's best addressed through education, prevention and community-based treatment..." Screening for alcohol and other drug use during pregnancy is considered standard of care.

The barriers and stigma that prevent women from seeking help for alcohol use disorder can be overcome through education, compassionate, empathetic care, and evidence-based treatment. And remember, Recovery IS Possible; People Can and Do Get Better! If you or a loved one is struggling with alcohol use, please reach out: Nebraska Medicine Addiction Services can help. Please call 402.552.6007.

Contributed by Kenneth Zoucha, MD, FAAP, FASAM

UNMC Department of Psychiatry, Addiction Medicine Division

Article references are available upon request, call the Olson Center at 402.559.6345



Let's Talk About Fibroids

Fibroids, also known as myomas or leiomyomas, are incredibly common. Estimates vary, but as a general rule, at least 30% of women have them by the time they reach menopause — and those are the ones we can see on ultrasound. When we look at hysterectomy or autopsy studies, the prevalence may be as high as 80%.

For being so common, few women understand what fibroids are and what impact they have. Fibroids are solid, noncancerous growths within the muscle of the uterus. If you've pet an old dog and felt fatty lumps (lipomas) under his skin, fibroids are kind of like those lipomas — they exist and they increase with age, but most of them don't matter. They're completely separate from ovaries or ovarian cysts.

The impact of fibroids on health and quality of life depends on both their size and placement. Fibroids can be anywhere from the middle of the uterus where bleeding occurs and babies grow, to the muscle layer, to attach onto the outside of the uterus. The fibroids in the bleeding layer tend to matter the most. Imagine squeezing water out of a washcloth. If you put a pinecone in the middle, the shape becomes awkward, and it becomes harder to clamp down around it and squeeze the water out. Fibroids can act like that pinecone, making it harder for the uterus to clamp down on bleeding vessels. This can make periods worse.

The fibroids in the muscle layer may or may not matter. Most of them, especially if they aren't large, are like putting ping pong balls in a down comforter: they exist, and you may be able to find them, but they shouldn't affect sleep (or bleeding, or fertility). If they get larger and change the shape of the uterus, they certainly may cause pain or worsen bleeding, but many don't.

Then there are the fibroids on the outside of the uterus. These are getting a piggy back ride. They don't affect bleeding or fertility, and they only tend to matter if they get so large that they cause pressure or pain.

When fibroids need treatment, what we do about them depends on their location and size as well as fertility goals. Fibroids inside the bleeding layer often need to be treated. Fortunately, those can often be treated with a same day surgery that doesn't require any skin incisions. A camera is inserted into the vagina and cervix to look in the uterus and shave down the fibroid, until the shape of the uterine cavity is normal again.

For the fibroids in the muscle layer or the outside of the uterus, treatment is personalized. Sometimes, the best answer is to help lighten periods with medicines. For people with large, problematic fibroids who desire future pregnancy, we can take out just the fibroids, but that requires major surgery. Unless future fertility is a goal, we usually don't remove just the fibroids - ironically, taking out the uterus is safer than taking out just the fibroids. But hysterectomy isn't the only option. Other minor surgeries may be helpful, or combinations of medicine and surgery.

Fibroids are common and deserve knowledge and discussion, but not fear. They are a potential cause of uterine pain and heavy bleeding. They are also a treatable cause. If you have further questions about them or wonder if they might explain your symptoms, please don't hesitate to reach out! That's what we are here for.

> Contributed by Katherine Lessman, MD UNMC Department of OB-GYN



Mission Statement

The Mission of the Olson Center for Women's Health is to provide a national comprehensive health science center at the University of Nebraska Medical Center. Based in the Department of Obstetrics and Gynecology, the center enables UNMC to make distinctive strides in education, research, and service through innovative approaches to women's health issues.

Want More Information? Visit our website: OlsonCenter.com

Learn more about our health care providers, services, and programs available at the Olson Center for Women's Health. Our website also offers women's health information. Here are a few topics:

- Breastfeeding
- Breast Health and Disease
- Cardiovascular Health
- Gastrointestinal Health
- Incontinence
- Gynecologic Health
- Reproductive Endocrinology/Infertility
- Pregnancy
- Wellness

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University of Nebraska Medical Center 989450 Nebraska Medical Center Omaha, NE 68198-9450

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Dr. Jennifer Griffin Reflects on New Role



Greetings from the Medical Director!

I am thrilled and honored to be stepping into the role of medical director of the Olson Center for Women's Health.

As a clinic devoted to comprehensive women's health in the context of a cutting edge academic health science center, it is our mission to bring the best quality health care to our patients. This is the place where we bring it all together — education, research, teaching, and leadership — to the service of our

patients, their families, and the larger community. I have been a part of the department since my training as a resident, and there is no place I'd rather be.

As our campus and its need for security have grown, we recognize that the physical space and environment can feel overwhelming. This is one of the reasons our Olson Center leadership team has been focused on improving the personalized experience for our patients entering the comfort of our clinics at the 4th floor Durham Outpatient Center and Village Pointe. After the hustle and bustle of parking and screening, we want you to feel known and heard in our space. The collaboration between our providers and staff and YOU, our patient, is critical to improving the experience and ultimately individual and community health outcomes.

Thank you for your ongoing trust and support.

Contributed by Jennifer Griffin, MD, MPH UNMC Department of OB-GYN

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