

Substance Use Disorder Among Anesthesia Providers

Joy MacCracken, RN, SRNA & Andrea Sias, RN, SRNA
Faculty Advisor: Dr. Jennifer Greenwood, PhD, CRNA
Rosalind Franklin University



No Conflicts of Interest to Declare

Learner Objectives

Discuss	Recognize	Describe	Outline
Discuss recent statistics and trends related to SUD among anesthesia providers (including the most common drugs of abuse)	Recognize the signs of an impaired individual and how to safely intervene	Describe the management of suspected substance use among colleagues	Outline common barriers to re-entry into practice

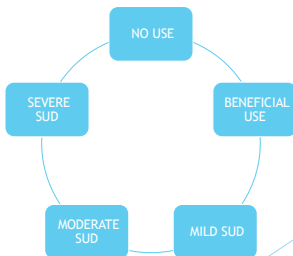
Topic Outline

- Education**
- Early Detection
- Management
- Re-Entry into Practice

ROSALIND FRANKLIN UNIVERSITY of MEDICINE AND SCIENCE

What is Substance Use Disorder (SUD)?

- ▶ "Substance use disorder occurs when the recurrent use of alcohol and/or drugs causes clinically significant impairment, including health problems, disability, and failure to meet major responsibilities at work, school, or home" - SAMHSA
- ▶ Exists on a spectrum
- ▶ May have a co-existing mental health condition such as:
 - ▶ Anxiety
 - ▶ Depression
 - ▶ Attention deficit hyperactivity disorder (ADHD)
 - ▶ Bipolar disorder
 - ▶ Schizophrenia



(Substance Abuse and Mental Health Services Administration [SAMHSA], n.d.)

Why is This Important?

Many healthcare professionals with SUD are often unidentified, underreported and therefore, left untreated

Leads to those professionals placing both themselves and the patients they care for at risk

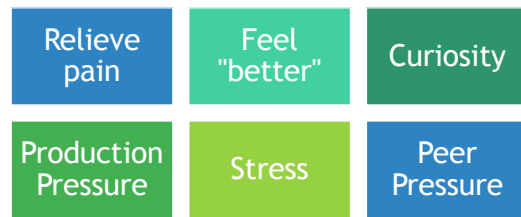
The incidence of healthcare workers with a SUD is approximately 10%

Anesthesia and Substance Use Disorder (SUD)

- ▶ #1 occupational hazard for anesthesia professionals
- ▶ **Incidence:** total number of new cases of individuals within a population who develop a disease or health condition during a given time period (cross-sectional)
 - ▶ The incidence of developing a SUD in anesthesia is approximately 10%
- ▶ **Prevalence:** total number of individuals within a population who develop a disease or health condition over a specific time period (often lifetime)
 - ▶ Prevalence of developing a SUD over the course of an anesthesia provider career is approximately 60%

(National Institute of Mental Health [NIMH], n.d.)

The Start of a Substance Use Disorder



High Risk Individuals

- ▶ Genetic Component
 - ▶ Family history of addiction
- ▶ History of abuse
 - ▶ Physical, emotional, and/or sexual
- ▶ Easy access to controlled or addictive substances
- ▶ Pre-existing mental health condition diagnosis
- ▶ Individuals with increase physical pain and/or mental exhaustion
- ▶ High-stress work environments
- ▶ Increased production pressure at work

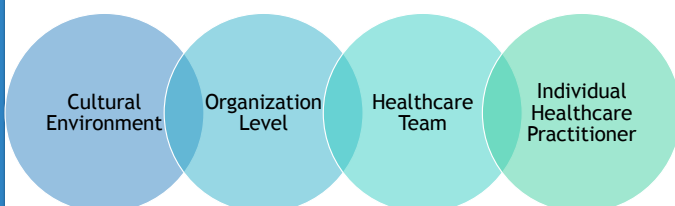
(AANA, 2021)

Stigma Surrounding Substance Use Disorder

- ▶ Addiction is NOT a choice. Addiction is a disease process.
- ▶ Types of stigma surrounding SUD
 - ▶ Self
 - ▶ A person internalizes negative perceptions of SUD and applies these feelings to themselves in the form of "self-talk"
 - ▶ Social
 - ▶ Negative behaviors or attitudes about those who use drugs or have a SUD
 - ▶ Structural
 - ▶ Policies that lead to increased stigma surrounding drug use
 - ▶ Insurance policies, workplace policies
 - ▶ Healthcare workers bias against patients or colleagues with SUD
- ▶ Leads to avoidance of seeking help and/or embarrassment

(Government of Canada, 2022)

Framework For Change



Why Focus on Substance Use Disorder Now?



Recent survey data indicate that 34% of the respondents who suspected a peer of substance use but did not report this concern to anybody due to their fear of being wrong



It is important to increase awareness to this topic through education. Our goal is to promote awareness and confidence in individuals to report substance misuse if identified in their colleagues while also reducing the stigma associated with substance use disorder

(Avila et al., 2020; Tylka et al., 2021)

Topic Outline



Education



Early Detection



Management



Re-Entry into Practice

ROSALIND FRANKLIN UNIVERSITY of MEDICINE AND SCIENCE

PHYSICAL

BEHAVIORAL AND
SOCIAL

PSYCHOLOGICAL

GENETIC

WORKPLACE-
SPECIFIC

ANESTHESIA-
SPECIFIC

General Risk Factors

Physical and Genetic Risk Factors

- ▶ Acute Pain
- ▶ Chronic Pain
- ▶ Inherited predisposition
- ▶ Decreased number of intrinsic neurotransmitters
 - ▶ e.g., dopamine, serotonin

(AANA, 2021)

Behavioral and Social Risk Factors

- ▶ Poor coping skills
- ▶ Personal history of emotional, sexual and/or physical abuse
- ▶ Poor support system
- ▶ Stressful home environment
- ▶ History of alcohol abuse
- ▶ History of drug abuse

(AANA, 2021)

Workplace Specific Risk Factors for the Development of a SUD

- ▶ Stressful work environment
- ▶ Production pressure
- ▶ Poor work-life balance
- ▶ Burnout
- ▶ Fatigue

(Bell et al., 1999)

Anesthesia Specific Risk Factors

- ▶ Increased risk within the first 5 years of becoming a CRNA
- ▶ Direct Access to addictive substances including: IV anesthetics, opioids, benzodiazepines, inhalational agents, among other drugs with the potential for abuse
- ▶ Exposure and potential sensitization to the medications that are administered daily

(Rupprecht, 2022)

Physical Signs of Impairment

- ▶ Significant weight loss
- ▶ Bloodshot eyes
- ▶ Dilated or pinpoint pupils
- ▶ Drowsiness
- ▶ Slurred speech
- ▶ Needle marks
 - ▶ Often non-visible injection sites are chosen

(Rupprecht, 2022)

Behavioral and Psychological Signs of Impairment

- ▶ Mood swings
- ▶ Irritability or hostility
- ▶ Poor or (increased) performance
- ▶ Increase number of errors or injuries
- ▶ Confusion
- ▶ Memory loss
- ▶ Poor concentration
- ▶ Social withdrawal from friends, family, or hobbies

(Rupprecht, 2022)

Potential Signs of Drug Diversion

- ▶ Provider who uses more controlled substances than expected for case
- ▶ Overtime, long hours, offering to relieve colleagues often
- ▶ Arrives early or stays late often
- ▶ Multiple bathroom breaks
- ▶ Refusing relief for breaks
- ▶ Drugs or syringes in pockets
- ▶ Increased amount of unwitnessed drug wasting

(AANA, 2021)

Most Common Substances Abused in Anesthesia

	Avila et al. (2021) n= 518	Tylka et al. (2022) n= 404	Bell et al. (2006) n= 2736	Bell et al. (1999) n= 1709
Opioid	85%	80%	51%	24%
Propofol	21%	11%	15%	25%
Benzodiazepines	15%	11%	18%	40%
Inhalation	9%	5%	14%	25%
Polysubstance	9%	9%	---	64%
Dissociative drugs	4%	6%	2%	16%

Culture Change

- Illuminate the frequency of random drug testing procedures in various facilities/organizations

Policy Change

- Model Policies and Protocols of other High Reliability Organizations (HROs)

Steps to Increase Early Detection of Substance Misuse

Topic Outline



Education



Early Detection



Management



Re-Entry into Practice

ROSALIND FRANKLIN UNIVERSITY of MEDICINE AND SCIENCE

If you suspect a co-worker of substance use

Acute incident:

- ▶ Ensure the safety of the patient
- ▶ Ensure the safety of the provider
- ▶ Do not let the person out of your sight and do not let them drive
- ▶ Include a trained interventionist, family, spouse, and colleagues
- ▶ Have a bed in a treatment facility ready
- ▶ As a last resort call the police only in cases of fear of harm to the person or others

If you suspect a co-worker of substance use

Suspected:

- ▶ Review employer's policies
- ▶ Assemble an intervention team, including a trained interventionist
- ▶ Invite the individual into an intervention meeting
- ▶ Do not let the person out of your sight and do not let them drive
- ▶ Have a bed in a treatment facility ready
- ▶ As a last resort call the police only in cases of fear of harm to the person or others

Reporting is Mandated under the Illinois Nursing Practice Act

Section 1300.110 Mandatory Reporting of Impaired Licensees

"In the past 12 months, have you suspected a colleague of abusing or using drugs at work?"

"If yes, what did you do with that information?"	Avila et al. (2021) (n=56)	Tylka et al. (2022) (n=35)
I reported my concerns to a supervisor	59%	40%
I did not take any action	34%	46%
I discussed it with the person suspected of using the drug	11%	3%
Other	5%	11%
I talked to the Human Resources department at work	4%	0%
I called the AANA 24-hour Helpline or another substance abuse helpline	2%	0%

Failure to Rescue - Fear of Being Wrong

"What do you think the barriers are to peer reporting of substance abuse?"	Avila et al. (2021)	Tylka et al. (2022)
Fear that you are wrong*	87%	64%
Loss of license, job & income for the colleague	63%	38%
Fear of getting colleague "in trouble"	57%	37%
Fear of reprisal or retribution from colleagues	52%	32%
Denial of the problem	45%	21%

Barriers to Reporting

- Fear of being wrong
- Loss of license, job & income for the colleague
- Fear of getting colleague "in trouble"
- Fear of reprisal or retribution from colleagues
- Denial of the problem
- Stigma
- Psychiatric comorbidities

Self-Reporting in Illinois

Illinois Department of
Financial and Professional
Regulation
(312) 814-6910



Section 1300.120 Care Counseling and Treatment Agreement

Resources

AANA Helpline

•800-654-5167

SAMHSA

•1-800-662-HELP
(4357)

Parkdale Center

Rodrigo Garcia - Chief Executive Officer
350 Indian Boundary Road
Chesterton, Indiana 46304



<https://www.parkdalecenter.com/>



Substance Use Treatment (888) 883-8433



Individual Mental Health
Counseling (219) 791-1006

Topic Outline



Education



Early Detection



Management



Re-Entry into Practice

ROSALIND FRANKLIN UNIVERSITY of MEDICINE AND SCIENCE

Barriers to Re-entry



Personal

Feelings of shame
Stigmatization
Fear of relapse



Professional

Punitive actions by state BONs
Limited access to employment



Practice

Lack of education on SUD
Lack of collegial support
Negative attitudes/work culture

- ▶ Begins with self-reporting
 - ▶ Acknowledge impairment
- ▶ Confidential
- ▶ Agree to a non-negotiable contract that requires completion of the ATD program in lieu of disciplinary action
- ▶ In patient treatment or intensive outpatient treatment
- ▶ 2-5 years of monitoring
 - ▶ Random drug testing
- ▶ Participation in a 12-step program
- ▶ Retention, Rehabilitation, and Re-entry

What is an ATD program?

Alternative to Discipline Program

Pros:

- Confidential
- Maintain license & ability to return to practice
- Getting needed help
- High success rates
- Avoidance of permanent disciplinary action

Cons:

- Financial requirement
- Time away from work
- Time period where you cannot pass medications

Alternative to Discipline Programs

States without ATD Programs

- ▶ Alaska
- ▶ Georgia
- ▶ Hawaii
- ▶ Nebraska
- ▶ North Dakota
- ▶ Wyoming

Find your states ATD program

- ▶ <https://www.ncsbn.org/nursing-regulation/discipline/board-proceedings/alternative-to-discipline.page>

Readiness for Re-entry



Refusing enrollment into and alternative to discipline program could lead to...

- ▶ Termination
- ▶ A suspended or revoked license
- ▶ Probation
- ▶ Criminal conviction

Relapse Prevention



Personal Factors

Removing obsession
Self-realization
Seeing the future
Inner Strength



External Factors

Talking to others
State agency involvement
Getting a chance
Work environment
Time



ROSALIND FRANKLIN
UNIVERSITY
of MEDICINE AND SCIENCE

Thank You!

References

- American Association of Nurse Anesthesiology (AANA). (2021). Addressing substance use disorder for anesthesia professionals. Retrieved on June 6, 2022 from <https://www.aana.com/press-releases/2021/06/06/addressing-substance-use-disorders-among-nurse-anesthetists>
- American Association of Nurse Anesthesiology (AANA). (2020). Zwerling 2 - Catch me if you can: The impaired provider [Video file]. Retrieved from <https://www.aana.com/press-releases/2020/06/06/catch-me-if-you-can-the-impaired-provider>
- Avery, J., Knoopfmacher, D., Mauer, E., Kast, K. A., Greiner, M., Avery, J., & Penzner, J. B. (2019). Improvement in residents' attitudes toward individuals with substance use disorders following an online training module on stigma. *HSS Journal*, 15(1), 31-36. <https://doi.org/10.1007/s11845-018-0643-3>
- Avila, A., Olakowski, P., & Greenwood, J. (2021). Substance Use Disorder Among CRNAs [unpublished manuscript]. Department of Nurse Anesthesia, Rosalind Franklin University of Medicine and Science, North Chicago, United States.
- Baldwin, M. R. (2007). Impaired healthcare professional. *Critical Care Medicine*, 35(2), 106-116. <https://doi.org/10.1097/CCM.0000000000000000>
- Bell, D., McDonough, J., Ellison, J., & Fitzhugh, E. (1999). Controlled drug misuse by certified registered nurse anesthetists. *AANA Journal*, 47(3), 133-140.
- Bocimowski, G. (2012). Patient perceptions of pain management therapy: A comparison of real-time assessment of patient education and satisfaction and registered nurse perceptions. *Pain Management Nursing*, 13(4), 186-191. <https://doi.org/10.1016/j.pmn.2010.04.004>
- Bryson, E. O., & Silverstein, J. H. (2008). Addiction and substance abuse in anesthesiology. *Anesthesiology*, 109(5), 905-917. <https://doi.org/10.1097/ALN.0b013e3181890dc7>
- Carter, T., McMillan, S. P., & Patrician, P. A. (2019). Barriers to reentry into nurse anesthesia practice following substance use disorder treatment: A concept analysis. *Workplace Health & Safety*, 47(4), 189-199. <https://doi.org/10.1177/1527257519871103>
- Christon, G. W., Haviland, M. G., & Riggs, M. L. (2002). The medical condition regard scale: Measuring reactions to diagnoses. *Academic Medicine*, 77(3), 257-262. <https://doi.org/10.1097/00001888-200203000-00017>
- Council of Accreditation of Nurse Anesthesia Educational Programs (COA). (2022). *Standards for accreditation of nurse anesthesia programs*, 1st ed. Retrieved from <https://www.coa-na.org/wp-content/uploads/2022/05/Standards-for-Accreditation-of-Nurse-Anesthesia-Programs-Practice-Doctorate-revised-May-2022.pdf>
- Fertile, E. B., & Shortell, S. M. (2001). Improving the quality of healthcare in the United Kingdom and the United States: A framework for change. *The Milbank Quarterly*, 79(3), 281-315. <https://doi.org/10.1111/j.1468-0009.00028.x>
- Foli, K. J., Forster, A., Bostic, L. A., Zhang, Z., Zhang, L., & Stone, L. (2022). Nurse anesthetists: Current perceptions and practices related to substance use. *Journal of Nursing Regulation*, 12(4), 23-34. <https://doi.org/10.1016/j.jnrn.2021.03.008>

References

- Government of Canada. (2022). Stigma around drug use. Retrieved from <https://www.canada.ca/en/health-canada/services/ugcids/stigma.html>
- Hauet, C., Madden, E., Wilson, J., Tesson, W., & Mills, K. L. (2021). Effectiveness of online training for improving knowledge, attitudes, and confidence of alcohol and other drug workers in relation to co-occurring mental health conditions. *Drugs: Education, Prevention, and Policy*. <https://doi.org/10.1080/09638237.2021.1981349>
- National Institute of Mental Health (NIMH). (n.d.). What is prevalence? Retrieved from <https://www.nimh.nih.gov/health/topics/what-is-prevalence>
- Nasari, A., Makari, S., Lok, L. L., Gu, Q., Buhl, L., Jain, S., & Ortega, R. (2022). Perception of web-based didactic activities during the COVID-19 pandemic among anesthesia residents: Pilot questionnaire study. *JGIM Medical Education*, 8(1), 2108. <https://doi.org/10.3176/jgim>
- Qualtrics. (n.d.). Anonymous vs confidential surveys: Which is best. Retrieved on September 18, 2022 from <https://www.qualtrics.com/qualtrics-qa/anonymous-vs-confidential-surveys-answered>
- Rupprecht, N. (2022). The impaired anesthesia provider: Strategies to prevent, recognize, and treat substance use disorder within the workplace. *AANA Journal*, 90(1), 64-70.
- Savage, C. L., Daniels, J., Johnson, J. A., Keenan, K., Finelli, D. S., & Seale, J. P. (2018). The inclusion of substance use-related content in advanced practice registered nurse curricula. *Journal of Professional Nursing*, 34(3), 217-226. <https://doi.org/10.1016/j.profnurs.2017.09.009>
- Substance Abuse and Mental Health Services Administration (SAMHSA). (n.d.). Mental health and substance use disorders. Retrieved from Substance use disorder occurs when the recurrent use of alcohol and/or drugs causes clinically significant impairment, including health problems, disability, and failure to meet major responsibilities at work, school, or home
- Troutcall, A., Silva, K., Stickney, L., Johnson, R., & Holt, C. T. (2021). An asynchronous curriculum to address substance use disorder training needs for medical and surgical residents. *Journal of Public Health Management and Practice*, 27(3), 148-173. <https://doi.org/10.1097/PHH.0000000000000307>
- Tyba, S., Nell, A., & Greenwood, J. (2021). Prevalence of substance use disorder among Certified Registered Nurse Anesthetists [unpublished manuscript]. Department of Nurse Anesthesia, Rosalind Franklin University of Medicine and Science, North Chicago, United States.
- Yar, F., Herin, F., Julian, B., Solati, J. M., & Franchitto, N. (2019). Barriers to seeking help for physicians with substance use disorder: A review. *Drug and alcohol dependence*, 195, 116-121. <https://doi.org/10.1016/j.drugalcdep.2019.03.004>
- Warner, D. O., Berge, K., Sun, H., Haman, A., Hanson, A., & Schroeder, D. R. (2013). Substance use disorder among anesthesiology residents, 1975-2009. *JAMA*, 310(21), 2289-2294. <https://doi.org/10.1001/jama.2013.281954>
- Wright, E. L., McGuire, T., Monaghan, L. B., Schumacher, J. E., Zwerling, A., & Stullenberger, N. E. (2012). Opioid abuse among nurse anesthetists and anesthesiologists. *AANA Journal*, 80(2), 120-128.
- Wright, E. L., McGuire, T., Schumacher, J. E., Zwerling, A., & Monaghan, L. B. (2014). Protective factors against relapse for practicing nurse anesthetists in recovery from anesthetic opioid dependency. *Journal of Addiction Nursing*, 25(2), 66-73. <https://doi.org/10.1016/j.addnurs.2013.09.001>