

# Caring for patients who Inject Drugs

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PGY-2

FAMILY MEDICINE

# Agenda

- ▶ Definition and Overview of IVDU
- ▶ Prevalence
- ▶ Medical complications associated with IVDU
- ▶ Common drugs
- ▶ Harm Reduction
- ▶ Explore practical strategies to foster compassionate and effective care for these patients

# Definition

- ▶ What is Intravenous Drug Use?
  - ▶ Intravenous drug use (IDU), also known as injecting drug use, involves administering substances via a syringe and needle directly into the bloodstream. This method of drug administration is associated with various health, social, and economic consequences

# IVDU Overview

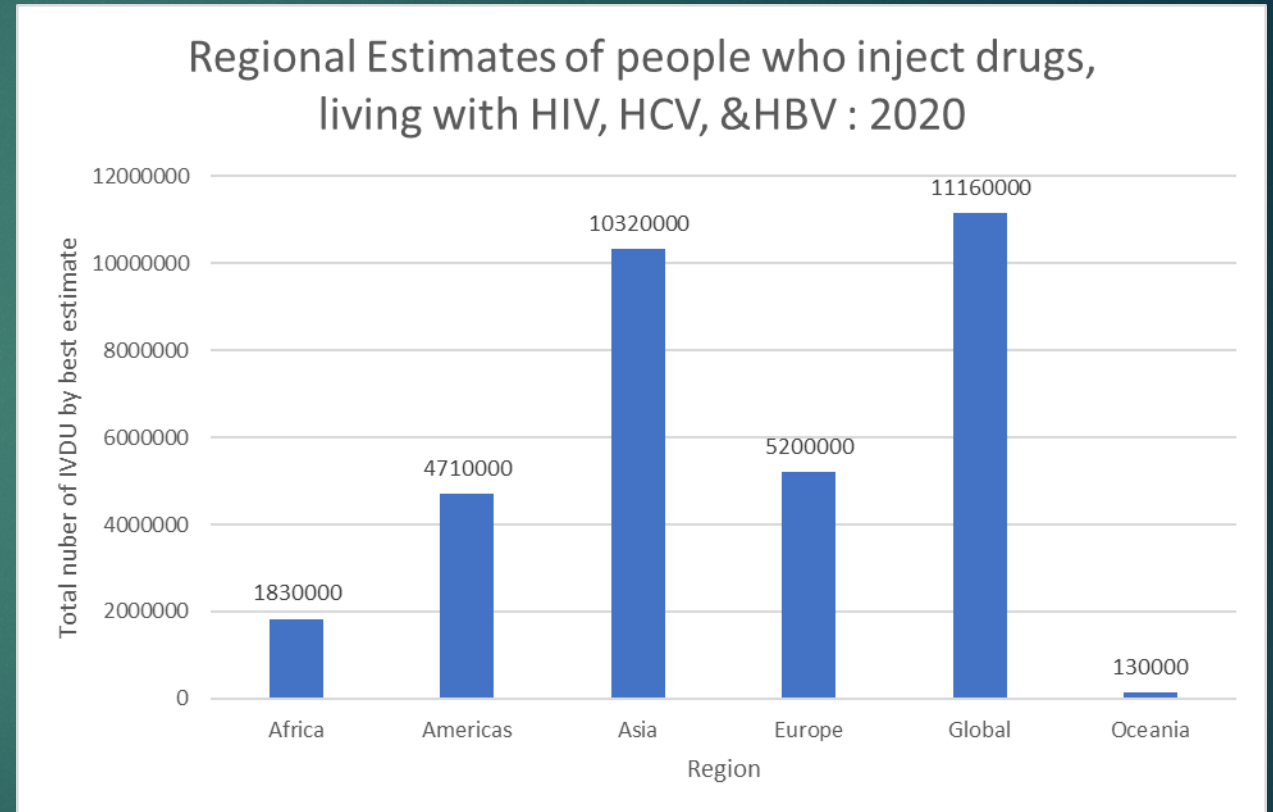
- ▶ IDU is closely related to the prevalence of illicit drug use, as substances like heroin, cocaine, and amphetamines are often injected. The topic of (IDU) is vastly complex and can be viewed from several angles including socio-political, financial, physical and mental health, crime and safety, autonomy and liberty, as well as on an international scale
- ▶ Owing to the nature of illicit drug use and the intersection with the legal system, it is sometimes difficult to obtain exact numbers when attempting to analyze IDU only through use and not through interaction with the healthcare or legal systems. In some cases, hospitalizations or known complications of IDU can be used as a proxy.

# Prevalence

- ▶ The United Nations Office on Drugs and Crime (UNODC) estimated that **11.3 million** people worldwide inject drugs, with opioids being the most commonly injected substances (UNODC, 2021). However, this figure is likely an underestimation, as injection drug use is often underreported for several reasons
- ▶ In 2018, the United States had approximately **3,694,500** people who inject drugs (PWID), accounting for **1.46%** of the adult population. The highest prevalence of injection drug use was found among males, non-Hispanic Whites, and adults aged 18 to 39

# Medical side effects of IVDU

- ▶ The UN report also compiled the number of people who inject drugs (PWID) living with Human Immunodeficiency Virus (HIV), Hepatitis B Virus (HBV), and Hepatitis C Virus (HCV)
- ▶ The trend has been increasing over the last decade and is concerning for many reasons, among them the impact it has on health of the population.



# Medical side effects of IVDU

- ▶ The rapid onset of drug effects when injecting heightens the risk of overdose
- ▶ Additionally, IDU can give rise to a variety of medical complications, including skin and soft tissue infections, endocarditis, and septic thrombophlebitis
- ▶ People who inject drugs often face multiple psychosocial challenges, including mental health disorders, homelessness, and social marginalization. These factors contribute to a higher risk of suicide and other external causes of death, like accidents and violence.

# Medical side effects of IVDU

- ▶ Stigma prevents patients from seeking care.
- ▶ Drug addiction can have profound repercussions on an individual's personal, social, and economic well-being, leading to homelessness, unemployment, and fractured family relationships
- ▶ These individuals may also resort to criminal activities to finance the drug use, resulting in incarceration and increased social marginalization



# Medical side effects of IVDU

Clinical Syndrome	Infection	Common Pathogens	Treatment / Prevention
<b>Skin and Soft Tissue Infections</b>	Abscess, cellulitis, necrotizing fasciitis, toxic-shock syndrome	<i>S. aureus</i> , <i>Streptococcus</i> spp., <i>Bacillus</i> spp., <i>Clostridium</i> spp.	Empiric first-line antimicrobial therapy; surgical debridement; wound irrigation; antitoxin administration for severe cases; vaccination (tetanus)
<b>Osteoarticular Infections</b>	Osteomyelitis, septic arthritis, spinal epidural abscess	<i>S. aureus</i> , <i>P. aeruginosa</i> , <i>Serratia marcescens</i> , <i>E. coli</i>	Prolonged courses of antibiotics; surgical debridement
<b>Endocarditis</b>	Infective endocarditis (IE)	<i>S. aureus</i> , <i>Streptococcus</i> spp., <i>Enterococcus</i> spp.	Prolonged courses of targeted antibiotics; possible surgical intervention; addiction medicine consultation and medication for opioid use disorder (MOUD)
<b>Viral Infections</b>	HIV, Hepatitis B (HBV), Hepatitis C (HCV)	Human immunodeficiency virus, Hepatitis B virus, Hepatitis C virus	Routine screening; pre-exposure prophylaxis for HIV; HBV vaccination; HIV, HBV, and HCV treatment with appropriate antiviral medications; linkage to care

# Common Drugs

- ▶ Quantifying the exact percentages of intravenous drug use by specific substances can be challenging due to variations in reporting methods, the nature of illicit drug use, and differences in regional drug preferences. However, a rough estimation of the relative prevalence of IDU drugs made by the UNDOC found that opioids, amphetamines, and cocaine were the most commonly used drugs

# Common Drugs

Substance	Estimated number of people injecting in 2019	Prevalence	Health Risks
Opioids	5.5 million	Most commonly injected substance worldwide	Overdose, transmission of bloodborne infections like HIV and Hepatitis C, addiction, respiratory depression
Amphetamines	2.2 million	Particularly prevalent in North America, Southeast Asia, and Australia	Cardiovascular disease, overdose, addiction, psychosis
Cocaine	Unknown (lower than opioids and amphetamines)	Less common than opioids and amphetamines	Cardiovascular disease, overdose, transmission of bloodborne infections like HIV and Hepatitis C, addiction
Prescription opioids	Varies by region and availability	A concern particularly in the United States	Overdose, addiction, transmission of bloodborne infections like HIV and Hepatitis C, respiratory depression
Other substances	Relatively low percentages	Includes synthetic opioids such as fentanyl and research chemicals	Overdose, addiction, transmission of bloodborne infections like HIV and Hepatitis C, various health risks depending on the specific substance

# What does all this mean?

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- ▶ The burden of IDU and related infections has been steadily increasing over the last decade in the United States and around the world.
- ▶ The complexity of the issue and the intersection of public health, political, and legal aspects make tackling the issue difficult but not impossible.

# Harm Reduction

- ▶ “Harm reduction is a set of practical strategies and ideas aimed at reducing negative consequences associated with drug use. Harm Reduction is also a movement for social justice built on a belief in, and respect for, the rights of people who use drugs.”

- National Harm Reduction Coalition

# Harm Reduction Strategies

- ▶ 1. Syringe Services Programs (SSPs):
  - ▶ Provide sterile needles to reduce infection risk.
  - ▶ Offer access to healthcare and social services.
- ▶ 2. Overdose Prevention:
  - ▶ Educate about naloxone use.
  - ▶ Provide fentanyl testing strips if available.
- ▶ 3. Safe Injection Education:
  - ▶ Clean injection sites, avoid sharing equipment.
- ▶ 4. Vaccination and Screening:
  - ▶ Hepatitis A/B vaccines, HIV/HCV testing.

# MOUD

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- ▶ Medication for opioid use disorder
- ▶ Overview of MAT:
  - ▶ Buprenorphine, methadone, and naltrexone reduce cravings and withdrawal symptoms.
- ▶ Benefits:
  - ▶ Reduces overdose risk, infectious complications, and criminal justice involvement.
  - ▶ Improves retention in care and quality of life
- ▶ Role in Rural Communities:
  - ▶ Telemedicine-based MAT programs can expand access.

# Buprenorphine

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- ▶ Partial opioid agonist approved for OUD
- ▶ California bridge for dosing resources
- ▶ Our treatment of choice at NCHN!
- ▶ Wide range for dosing and can be prescribed by any provider with a DEA



# Methadone

- ▶ A full opioid agonist approved by the FDA for OUD
- ▶ Methadone comes with its own set of challenges
  - ▶ Heavily regulated
  - ▶ Usually prescribed at an approved methadone clinic
  - ▶ Can cause QTc prolongation
  - ▶ Very long half life (up to 60 hours)
- ▶ It is a good option for those continuing to use opioids and wanting to start treatment
- ▶ May be helpful for those using high potency fentanyl

# Arkansas Methadone clinics

<u>Program Name</u>	<u>Street</u>	<u>City</u>	<u>State</u>	<u>Zip Code</u>	<u>Phone</u>	<u>Certification</u>	<u>First Full Certification Date/CMS Use</u>
Central Arkansas Treatment Services, LLC	<a href="#">5407 Highway 5 North, Suite 6</a>	Bryant	AR	72022	(501) 725-9098	Certified	06/19/2019
Northeast Arkansas Treatment Services, LLC	<a href="#">912 Osler, Suite B</a>	Jonesboro	AR	72401	(870) 336-0549	Certified	12/09/2014
University of Arkansas for Medical Sciences Substance Abuse Treatment Clinic	<a href="#">4224 Shuffield Drive, 4th Floor, Suite 4</a>	Little Rock	AR	72205	(501) 526-8400	Certified	11/21/2002
BHG LI, LLC	<a href="#">4260 Stockton Drive</a>	North Little Rock	AR	72117	(501) 664-7833	Certified	11/01/2003
Springdale Treatment Center, LLC	<a href="#">1607 S Old Missouri Road</a>	Springdale	AR	72764	(479) 306-4480	Certified	09/11/2008
Arkansas Treatment Services, LLC	<a href="#">408 Hazel Street</a>	Texarkana	AR	71854	(870) 774-0421	Certified	04/16/2013

# Community-Based Solutions

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## ▶ **1. Integrate Care Models:**

- ▶ Combine primary care, mental health, and addiction services.

## ▶ **2. Partner with Local Organizations:**

- ▶ Work with harm reduction programs and law enforcement for public health-focused approaches.

## ▶ **3. Advocate for Funding:**

- ▶ Secure grants for SSPs, mobile health units, and telemedicine infrastructure.

# Conclusion

- ▶ There are many ways to partner with patients in order to reduce the harms of IVDU
- ▶ The mainstay of treatment is medications and therapy
- ▶ It is important to screen for infectious diseases and underlying mood disorders
- ▶ Learn about your local resources, you don't have to do this alone!

# Resources

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- ▶ National Harm Reduction Coalition
- ▶ Nextdistro -> resources like needles and naloxone by mail
- ▶ ASAM.org
- ▶ Curbsiders addiction medicine series (great podcast!)
  
- ▶ Harm reduction international
- ▶ SAHMSA.gov
  - ▶ Multiple resources including registry of methadone clinics
  
- ▶ In Arkansas:
- ▶ UAMSHHealth
  - ▶ MATRIARC and project ECHO
  
  - ▶ Six Bridges clinic
  - ▶ Offers assistance to Arkansas residents between the ages of 12 and 21 who are dealing with substance dependence

# Resources

## MATRIARC and project ECHO

- ▶ MATRIARC (Medication Assisted Treatment Recovery Initiative for Arkansas Rural Communities) is a partnership with the Psychiatric Research Institute and the Arkansas Department of Human Services designed to expand evidence-based treatment for opioid use disorders.
- ▶ An addiction psychiatrist is available free of charge via telephone to offer consultations to primary care physicians, general psychiatrists, advanced practice nurses, physician assistants and mental health professionals providing medication-assisted treatment to patients dealing with opioid use disorder.
- ▶ Project ECHO is part of MATRIARC, weekly video conferences available to community health centers needing assistance in opioid addiction treatment. Video conferences are held each Friday from noon to 1 p.m., with experts in addiction, therapy and case management discussing a variety of subjects related to opioid abuse.

# Questions ?



# References

- ▶ National Harm Reduction Coalition
- ▶ Harm reduction international
- ▶ SAHMSA.gov
  - ▶ Multiple resources including registry of methadone clinics
- ▶ In Arkansas:
- ▶ UAMSHealth
  - ▶ MATRIARC and project ECHO
  - ▶ Six Bridges clinic
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