AETC AIDS Education & Training Center Program Mountain West

Women with substance use disorders: trends and special considerations

Jocelyn James, MD
Assistant Professor
Division of General Internal Medicine
University of Washington School of Medicine

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Panel Discussant

James Darnton, MD
Clinical Instructor
Division of General Internal Medicine
University of Washington School of Medicine

Disclosures

No conflicts of interest or relationships to disclose

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Acknowledgements

- This talk covers a range of topics in which I am not an expert. Future sessions led by more specialized experts could dive deeper into details.
- Most of the research I draw from for this talk reflects a binary view of gender and does not adequately address the experience of people who identify as non-binary/ gender non-conforming.
- Substance use during pregnancy is an important topic but not the focus here.
- I have provided care to women with SUD for >10 years, but my own lived experience is limited.

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Patient KJ

- 41 yo woman with opioid use disorder in methadone maintenance treatment, methamphetamine use disorder, severe PTSD, ongoing intimate partner violence
- Multiple severe medical problems: severe pulmonary hypertension, probable cirrhosis
- Previous homelessness and now feels unsafe at apartment so tends to stay with others
- Remains in MMT care but otherwise medical care episodic, mostly via emergency departments
- No preventive healthcare

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Outline

- Gender differences in patterns and consequences of substance use
- Key trends in substance use and overdose among women
- Gender-based disparities in substance use treatment and related conditions
- Treatment considerations for women with substance use disorders (SUD)
- Discussion / Q&A

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The big picture

- Patterns of substance use, progression of substance use, and access to treatment differ for women (compared to men)
- Gender-based power differences and violence/trauma affect women with SUD at all levels (individual, interpersonal, community, structural)
- Improving SUD treatment for women requires a gender-responsive, culturally competent approach and better understanding of SUD among specific subgroups of women

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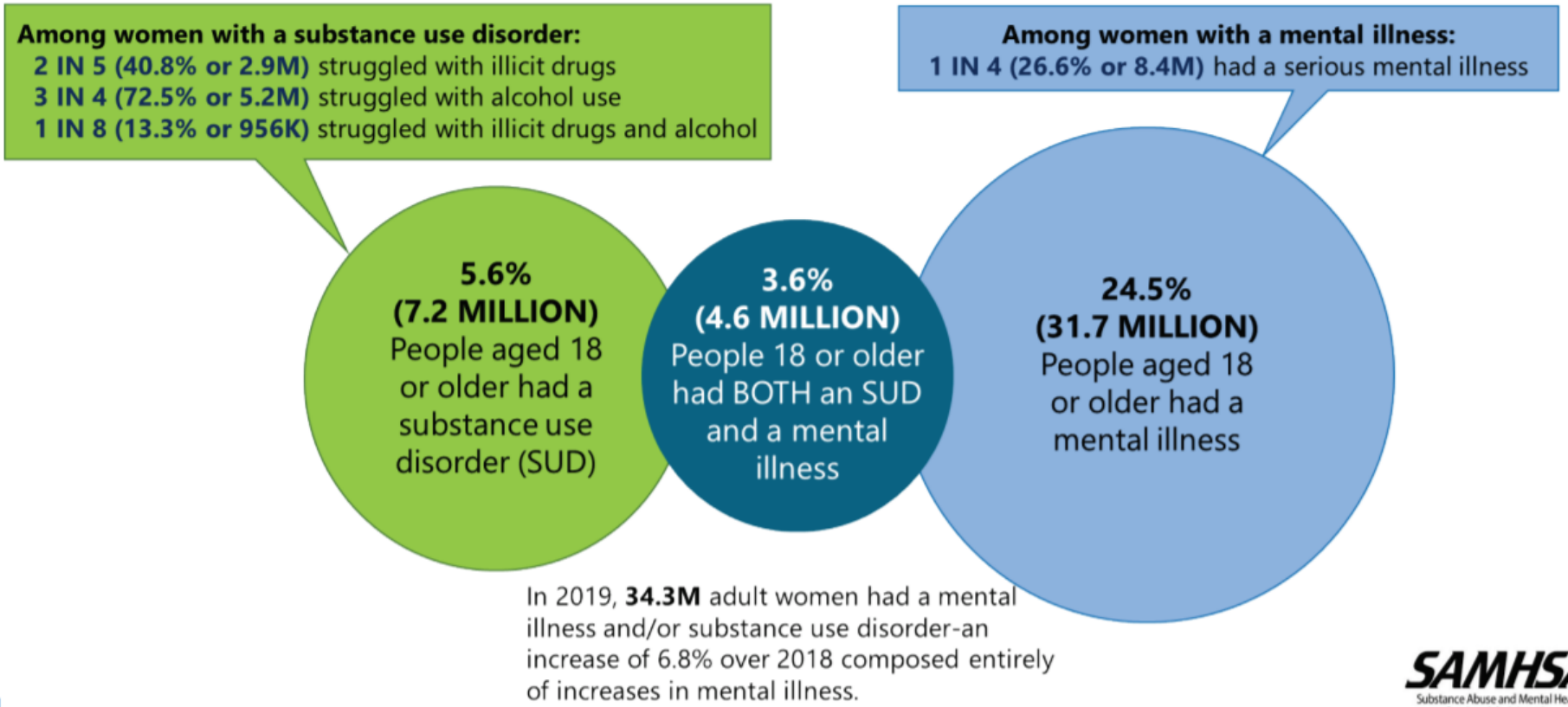
More men then women use substances and die from overdose; however, ***women who use substances increase their use more rapidly and incur more medical and social consequences***

Scope of substance use among women in US

Mental Illness and Substance Use Disorders in America among Women (≥18 y.o.)

PAST YEAR, 2019 NSDUH, Women 18+



In 2019, **34.3M** adult women had a mental illness and/or substance use disorder-an increase of 6.8% over 2018 composed entirely of increases in mental illness.

National Survey on Drug Use and Health (NSDUH) 2019, SAMHSA

SAMHSA Substance Abuse and Mental Health Services Administration

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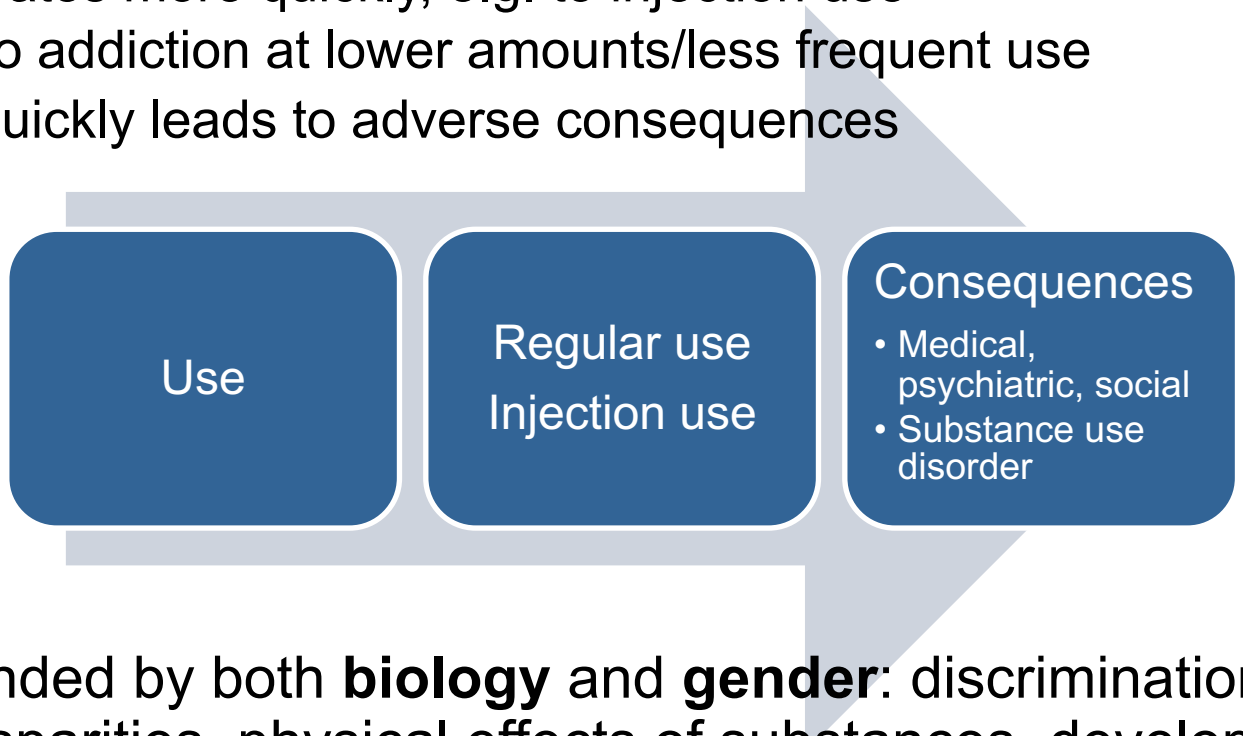
Initiation of substance use among women

Photo by ©ThinkStock/BananaStock

- Start using earlier, which is associated with higher risk of dependency
  - E.g., methamphetamine, alcohol
- More likely to be introduced to substances through relationships
- Once exposed, just as likely to start using

Progression of substance use in women

- "Telescoping:" use among women
  - accelerates more quickly, e.g. to injection use
  - leads to addiction at lower amounts/less frequent use
  - more quickly leads to adverse consequences



- Compounded by both **biology** and **gender**: discrimination, SES, health disparities, physical effects of substances, developmental issues, aging, co-occurring conditions

SAMHSA TIP 51, 2013

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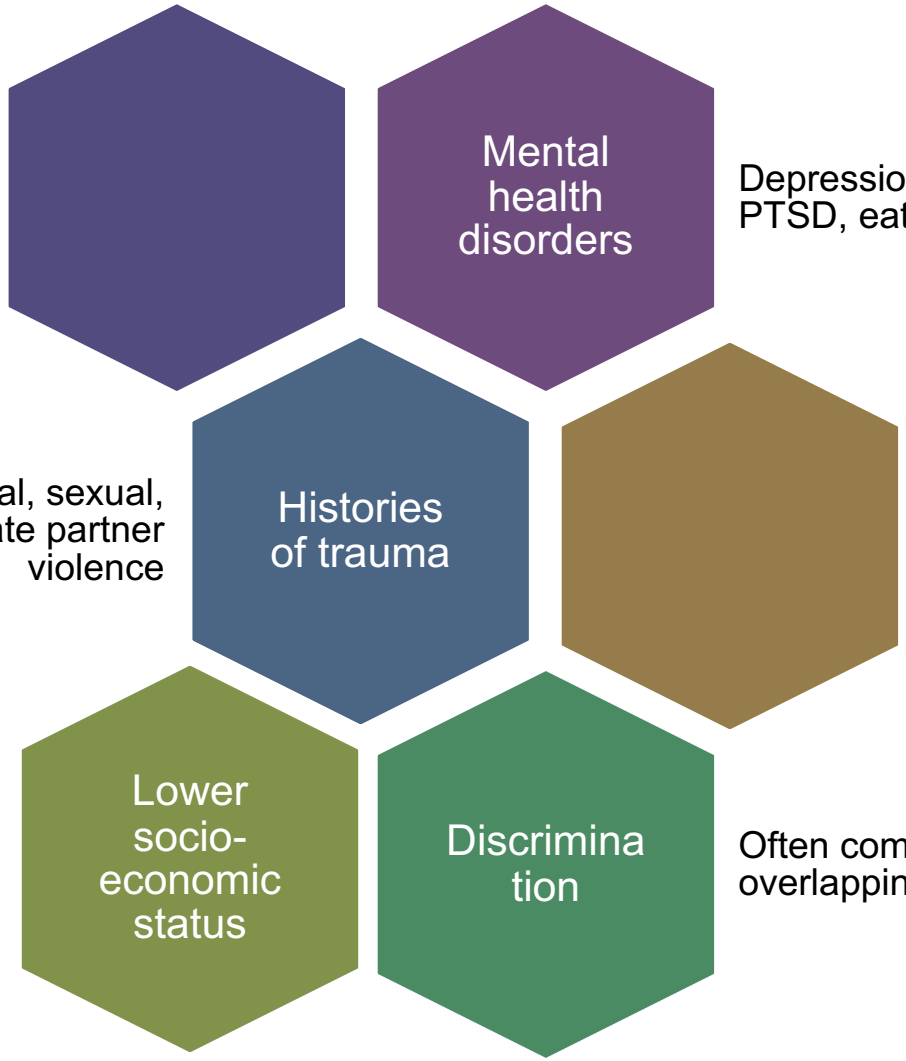
Increased risk for development of SUD



In 2019, >2/3 women with SUD reported mental illness over past year

SAMSHA Advisory to TIP 51, 2021

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Acceleration to consequences

- More likely to have depression, anxiety, PTSD, eating disorders
- More likely to have experienced trauma
- Discrimination, socioeconomic status, health disparities
- Biological factors, e.g.,
  - Sex hormones make women more sensitive to some drugs, e.g. to reinforcing effects of stimulants
  - Women and men metabolize alcohol differently
- More intense cravings and withdrawal symptoms

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Unique/disproportionate consequences for women who use substances

- Increased and accelerated effects of alcohol and other substances
- Effects on fertility and menstrual cycles
- Reproductive consequences for pregnant women
- Less likely to receive regular gynecologic exams, mammograms and cervical cancer screening
- Cycles of trauma
- Higher risk of losing custody

Carney et al 2006; NIDA, Substance Use in Women Drug Facts; SAMSHA Advisory TIP 51

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Relationships play many roles

- Women are more likely to
  - be introduced to substances through relationships
  - have partners w/ SUD
  - share injecting equipment
  - alter use according to caregiving responsibilities
- Men often control injection-related rituals, influence risk behavior
- Overlapping sex and drug use networks further increase exposure to HIV, hepatitis C
- Some familial factors increase a women's risk of SUD:
  - Exposure to chaotic, argumentative, or violent households
  - Expected to take on adult responsibilities as child

SAMHSA TIPS 2013; Meyer, 2019. Drug Alcoh Depend 197: 158-163

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Women more affected by trauma and violence

- Many forms: childhood maltreatment (sexual abuse, physical abuse, emotional abuse, neglect); witnessing abuse; adult sexual and physical abuse; intimate partner violence
- Trauma / PTSD is associated with *increased risk of SUD* and plays disproportionate role among women
  - E.g., 41% of women and 16% of men w/ OUD report childhood sexual abuse[1]
- Trauma / PTSD is associated with *increased severity of SUD*
  - *E.g.,* more substances used, # of treatment episodes, and health problems[2]
- Substance use contributes to further trauma
- Evidence across spectrum of substances

[1]Santo et al, Drug Alcohol Depend. 2021; 219: 108459; [2]Young and Boyd, Subst Abus. 2000 Mar;21(1):9-19

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The gender gap in prevalence of SUD and overdose appears to be narrowing (but it's complicated).

Narrowing gender gap

- *Men more likely to have SUD and die of overdose*
- However, evidence of narrowing gender gaps
  - Gender gap in **opioid use** narrowed substantially in second half of 20th century[1]
  - From 1999-2010, the rate of **drug overdose deaths** increased faster among women than men (151% vs 85) [2]
  - In 2019, **SUD among those ages 12-17** higher in females than males[3]
  - **Methamphetamine use among people with OUD** rising faster among women[4]

[1]Cicero et al, JAMA Psychiatry. 2014;71(7):821-826; [2]MMWR July 2013, vol 62 no 26; [3]NSDUH 2019; [4]Ellis, Drug Alcohol Dep. 2018;193:14-20

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Opioids: looking back 50 years

- Survey of people entering treatment for heroin, asked about initiation of use (age and opioid)
- Plotted as function of decade in which participants initiated use

Figure 1. Percentage of the Total Heroin-Dependent Sample That Used Heroin or a Prescription Opioid as Their First Opioid of Abuse

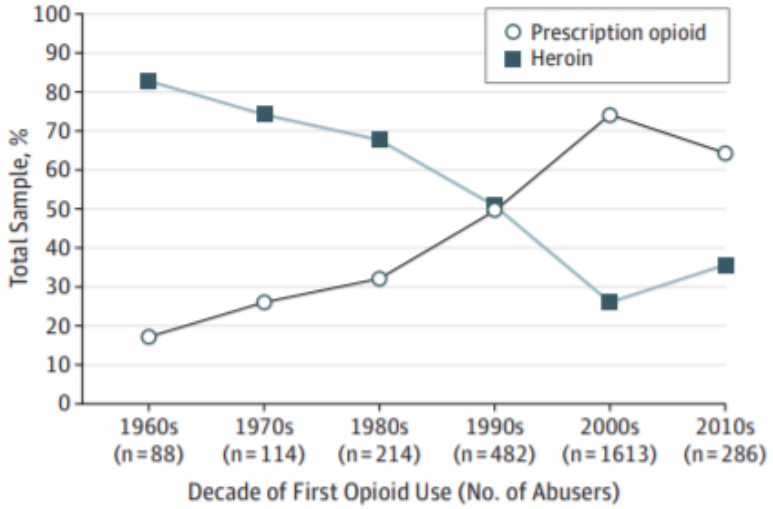
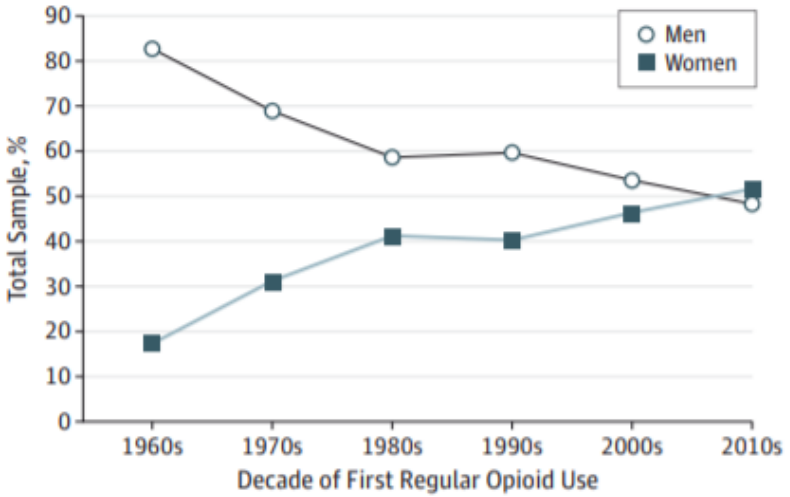


Figure 2. Sex Distribution of Respondents Expressed as Percentage of the Total Sample



Cicero et al, JAMA Psychiatry. 2014;71(7):821-826

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NMPO: non-medical use of prescription opioids

Use of opioids that were not rx'ed or are taken only for the experience /feelings they cause

- Fatal overdoses increased **5x among women, 3.6x among men** from 1999-2010
- Death rates **increased 70% among women** from 2004-2010

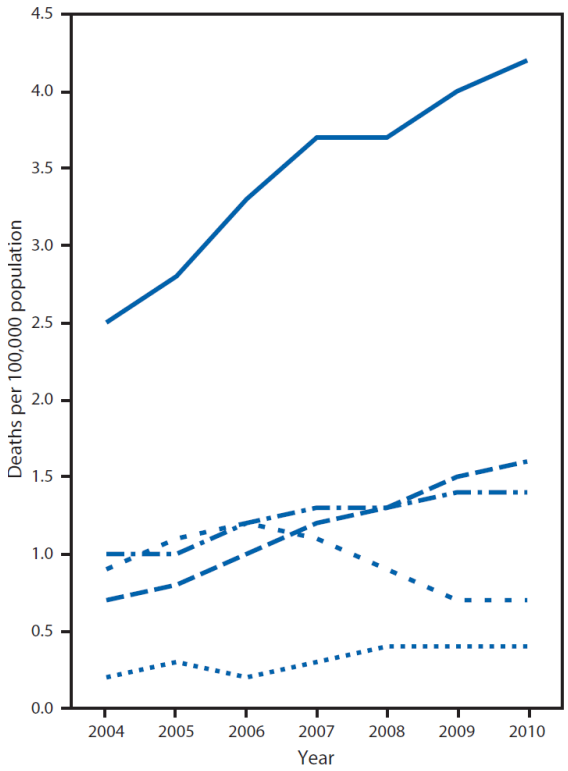

Figure: Crude rates for drug overdose deaths among women by drug class

MMWR July 2013, vol 62 no 26

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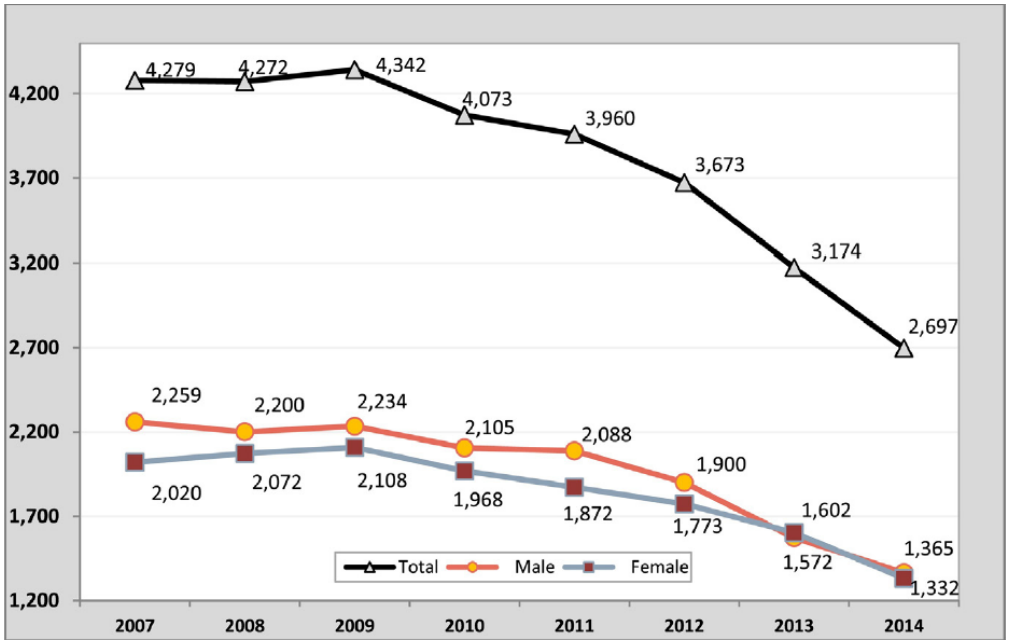
Past-year use of NMPOs, 2007-2014

- NMPO use now declining among women and men
- Women decreasing use at slower rate

Frequency of past-year use of NMPOs, 2007-2014, age 12 and up



Marsh et al., JSAT 87 (2018) 79-85; MMWR July 2013, vol 62 no 26

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Women and prescription opioids

- Increased prevalence, severity and duration of chronic pain among women
- Women more likely to be prescribed opioids for pain and at higher doses for longer periods
- Women may be more likely to use prescribed opioids to treat anxiety, depression
- Women progress from opioid initiation to opioid use disorder more quickly

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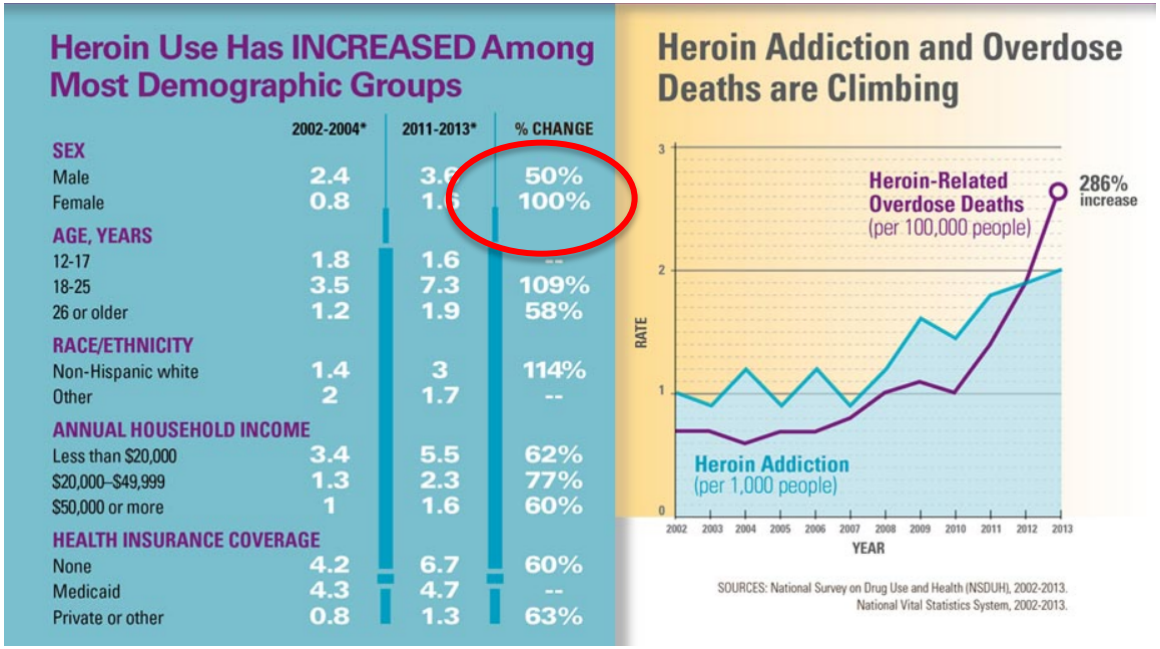
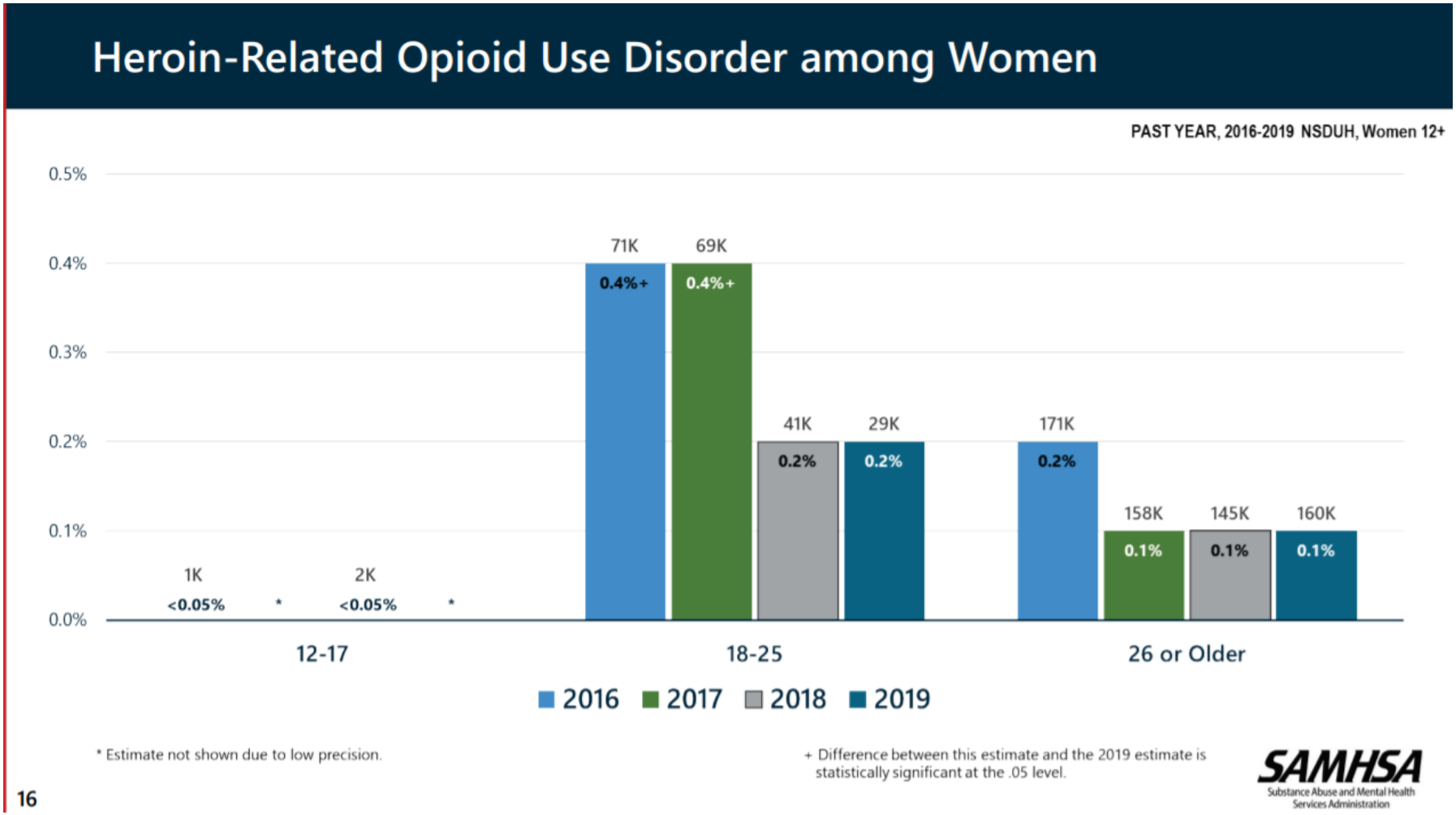
Heroin

- National survey data from ~2002-2013
  - ↑ heroin use, lifetime heroin use, and heroin use disorder among men and women[1]
  - Past-year heroin use increased faster among women [2, 3]



[1]Martins, *JAMA Psychiatry*. 2017;74(5):445-455; [2] Marsh et al., JSAT 87 (2018) 79-85; [3]MMWR July 2015, vol 64 no 26

More recent data



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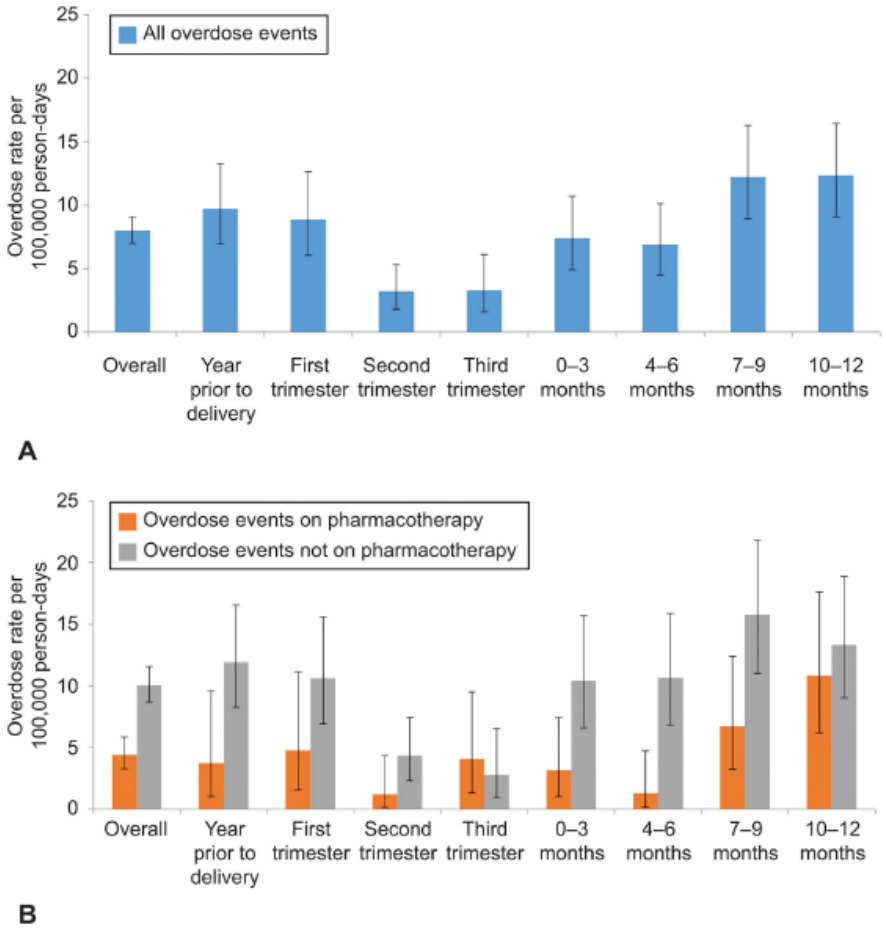
Overdose in pregnancy and beyond

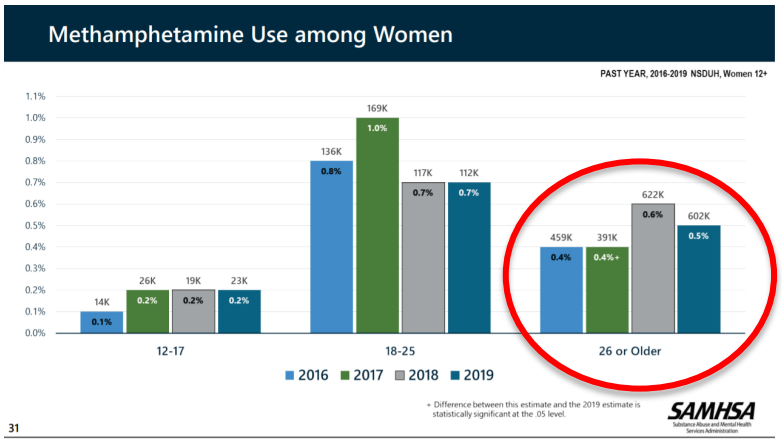
- Retrospective study of >4000 pregnant and post-partum women with OUD
- Outcome: overdose rates from year prior to year after pregnancy, compared by receipt of MOUD
- Overdose rates lowest in pregnancy, highest 7-12 months post-partum
- MOUD protective

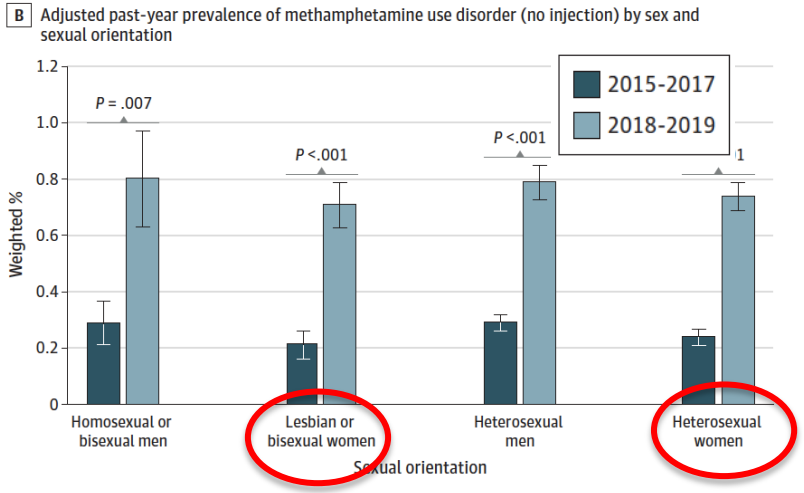


Schiff et al, Obstet Gynecol. 2018 August ; 132(2): 466–474. MOUD: medication for OUD

Methamphetamine

- Methamphetamine use increasing use among women age 26 and older
- Diversifying populations with increases in MUD among lesbian/bisexual and heterosexual women

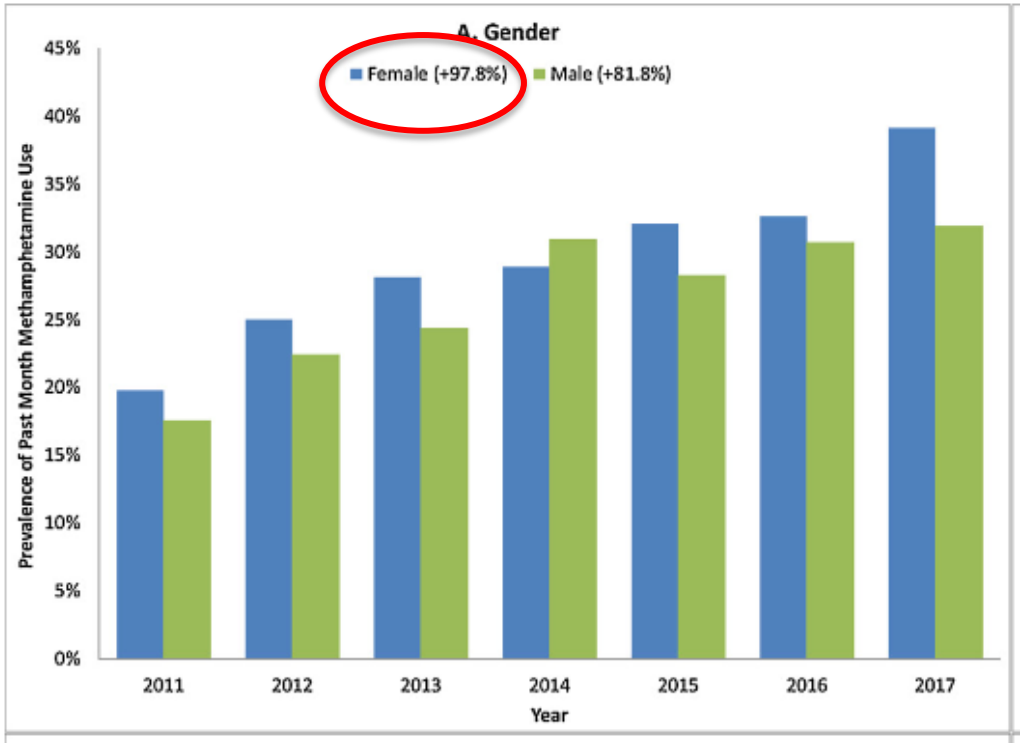




Han et al, JAMA Psychiatry. 2021;78(12):1329-1342: MUD: methamphetamine use disorder

Methamphetamine use in people with OUD

- National sample of people entering treatment for OUD, 2011-2017: methamphetamine use is increasing faster among women



Ellis, Drug Alcohol Dep. 2018;193:14-20.

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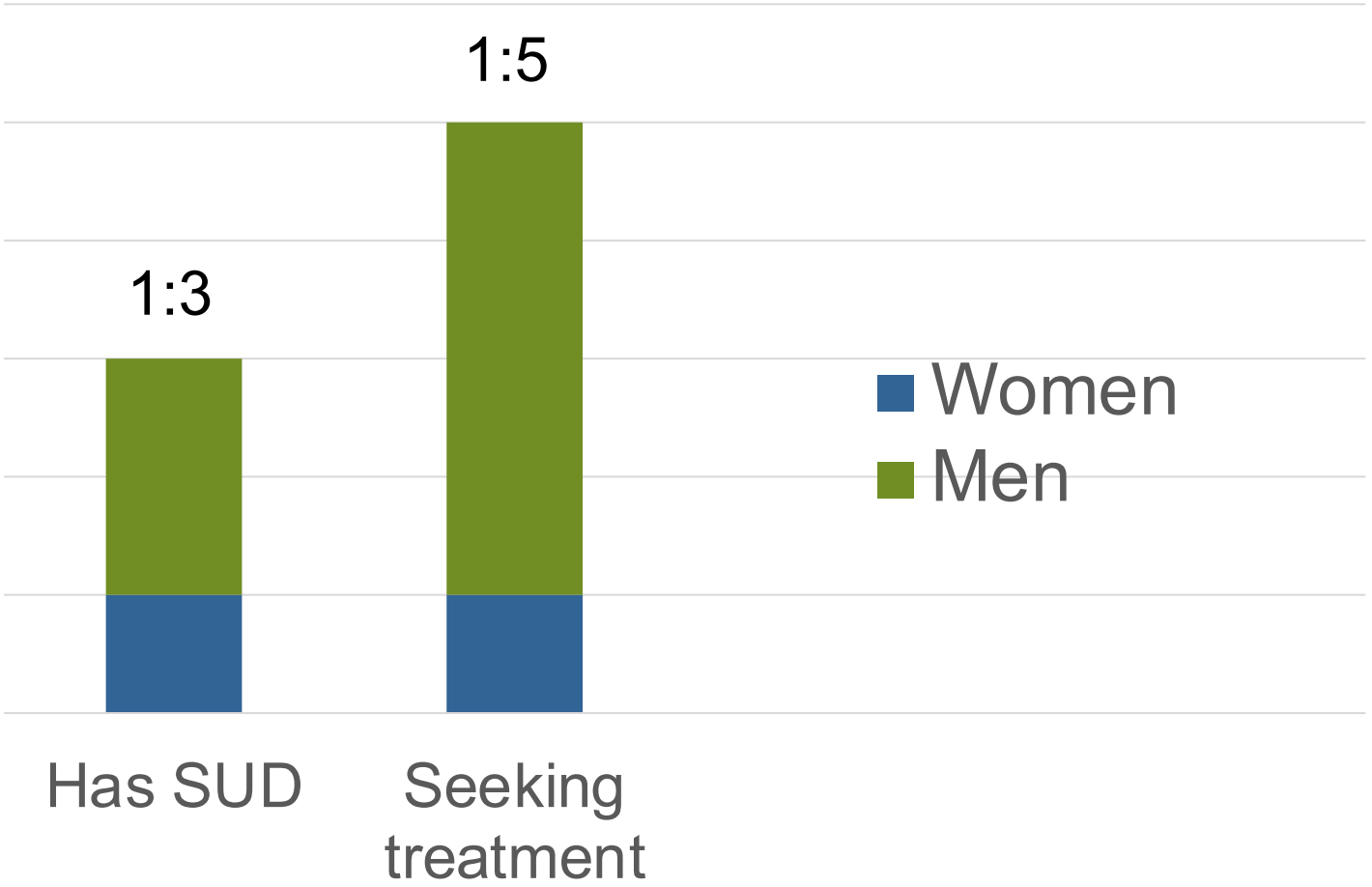
Women are less likely than men to receive treatment for substance use and women face disparities in related conditions.

Gender and SUD treatment



UN Office on Drug Use and Crime

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Key barriers to SUD treatment among women

- Fear of loss of child custody
- Stigma around SUD
- Lack of culturally appropriate programming
- Limited options for pregnant women
- Childcare /caregiving responsibilities
- Lack of partner/family support for treatment
- Limited economic resources
- Treatment environments that are not gender-responsive

➢ Histories of trauma and violence

➢ High prevalence of comorbid mental health disorders

SUD treatment among women

- Women more likely than men to seek treatment via PCP or MH provider
- Pregnancy can increase motivation/support for treatment, but effect lost afterward
- Additional/unique challenges for some women:
  - racial/ethnic minorities, sexual/gender minorities
  - women in criminal justice system
  - women who speak languages other than English
  - rural women
- Protective factors: higher education level, supportive family, older age, prior successful life experiences

Volkow, 2018. Principles Drug Addiction Treatment 2018 ; SAMHSA TIPS 2013

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Women in at least 45 states have faced criminal charges for drug use during pregnancy

December 28, 2018; January 13, 2019

"We have taken what is fundamentally a health problem and made it into a criminal law problem. We've used the criminalization of certain drugs for … controlling certain groups of people, particularly black and brown people…That this dynamic is "being used as a mechanism for controlling pregnant people should come as no surprise."

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Pregnant women: potential consequences of disclosure

- Loss of parental rights
- Stress of child welfare involvement
  - Guttmacher Institute report in 2018 found that 24 states and D.C. consider substance use during pregnancy a reportable child abuse offense
- Loss of bonding time
- Negative effects on finances, housing, employment

Patrick, S. W., & Schiff, D. M. (2017). A Public Health Response to Opioid Use in Pregnancy

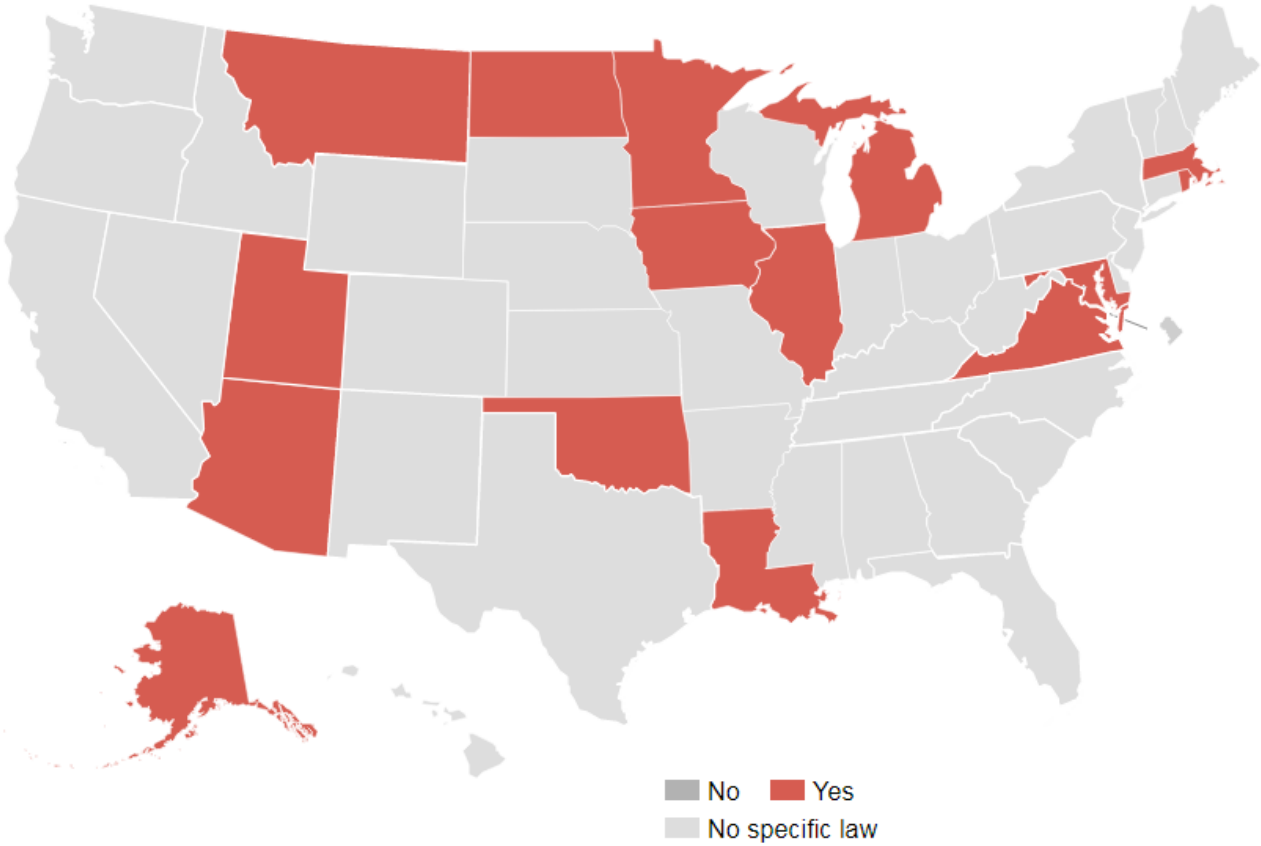
How states handle substance use during pregnancy

Compare states by

- Substance abuse during pregnancy is a crime
- Women have been prosecuted for drug use during pregnancy
- Substance abuse during pregnancy is child abuse
- Substance abuse during pregnancy is grounds for civil commitment
- Health care workers must report drug abuse during pregnancy

Fifteen states have laws requiring health care workers to report to authorities if they suspect a woman is abusing drugs during pregnancy.

- Testing is required if drug use during pregnancy is suspected



https://projects.propublica.org/graphics/maternity-drug-policies-by-state

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Women who use drugs face more stigma

- Women who use face more stigma than men who use
- Especially true for pregnant and parenting women
- Criminalization of drug use disproportionately impacts women
- Stigma affects treatment-seeking behavior, particularly when multiple stigmas are involved (female, older, racial or ethnic minority, HIV positive, depression diagnosis)

Blankenship, 2015. J Acquir Immune Defic Syndr: 69; Hammarlund et al, 2018, Subst Abuse Rehabil. 9 (115-136); Photo: The Atlantic

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Gender and SUD treatment retention

Once in treatment, gender by itself is not a significant predictor of retention or outcomes

- Individual factors are probably more important: psychiatric symptoms, socioeconomic status and stability, social support, etc.
- Examining interactions of gender with race/ethnicity, age, etc. may be more helpful than looking at gender alone

Greenfield et al, Drug and Alcohol Dependence 2006

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Women less likely to receive naloxone for opioid overdose

- Opioid involved overdoses in Rhode Island, 2012-2014
- Women nearly 3x as likely to have NOT received naloxone

TABLE 2. Association of patient and scene characteristics with no administration of naloxone during emergency medical services resuscitation attempts among individuals deceased due to an opioid overdose ($N = 124$)

		Unadjusted			Adjusted[a]		
		OR	95% CI	*p*-value	OR	95% CI	*p*-value
Age (in years)	Younger than 30 ($N = 30$)	1 (ref)	–	–	1 (ref)	–	–
	30 to 50 ($N = 52$)	3.4	1.0–11.4	0.04	3.2	0.9–11.3	0.07
	Older than 50 ($N = 42$)	5.9	1.8–19.9	<0.01	4.8	1.3–17.4	0.02
Gender	Male ($N = 89$)	1 (ref)	–	–	1 (ref)	–	–
	Female ($N = 35$)	3.4	1.5–7.7	<0.01	2.9	1.2–7.0	0.02
Race/ethnicity[b]	Non-Hispanic White ($N = 99$)	1 (ref)	–	–			
	Non-Hispanic Black[c] ($N = 8$)	0.7	0.1–3.5	0.63			
	Hispanic ($N = 11$)	1.7	0.5–5.9	0.43			
Body Mass Index (per point increase)		1.02	0.98–1.07	0.33			
Location of overdose	Home ($N = 81$)	1 (ref)	–	–			
	Other residence/hotel ($N = 28$)	0.5	0.2–1.3	0.17			
	Outdoors/Car/Other/ Unknown ($N = 15$)	1.6	0.5–4.8	0.43			
Visible Signs of potential drug abuse (e.g., paraphernalia, track marks)	Yes ($N = 43$)	1 (ref)	–	–			
	No ($N = 81$)	4.9	1.9–13.0	<0.01	3.3	1.2–9.2	0.02
Suicide attempt	Yes ($N = 3$)	NA[d]					
	No ($N = 121$)						

Sumner et al (2016), Use of Naloxone by Emergency Medical Services during Opioid Drug Overdose Resuscitation Efforts, Prehospital Emergency Care, 20:2, 220-225

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Women less likely to receive hepatitis C treatment

Survey of people who inject drugs in Seattle, WA in 2018

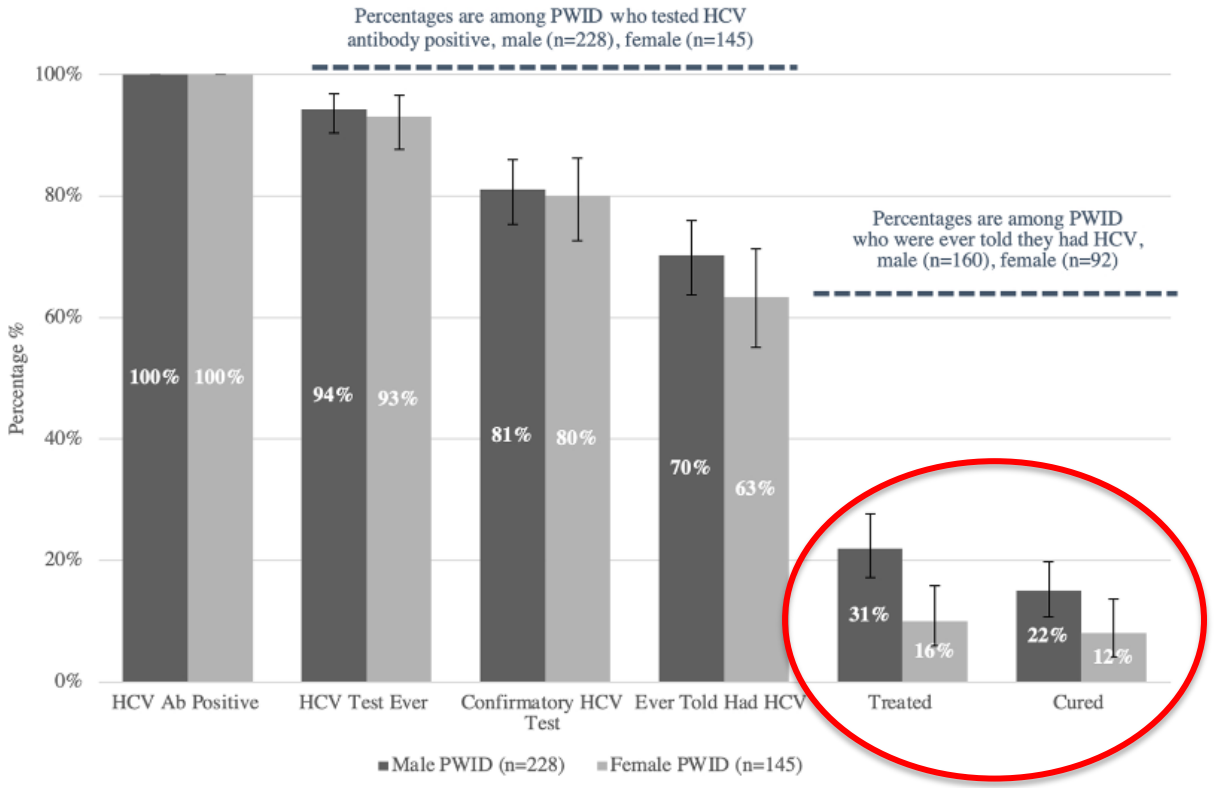

Table 2
Predictors of Treatment with Direct Acting Antiviral Therapy Among PWID Who Reported a Prior Diagnosis of HCV, 2018 Seattle area NHBS.

Characteristic	DAA Treatment n = 48 # (%)	No DAA Treatment n = 196 # (%)	OR (95 % CI)	Adjusted OR (95 % CI)
Age, mean (SD)	50.1 (10.8)	42.4 (11.4)	**1.06 (1.03–1.10)**	**1.05 (1.01–1.08)**
Gender				
Men	38 (79.2)	116 (59.2)	ref	ref
Women	10 (20.8)	78 (39.8)	**0.39 (0.16–0.86)**	**0.36 (0.16–0.78)**
Trans	0 (0.0)	2 (1.0)	–	–

Corcorran et al, Drug and Alcohol Dependence 220 (2021)

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HIV risk among women who use drugs

Caretaking responsibilities

Social vulnerability, lack of power and control

Intimate partner violence

Use of substances

Risks of substance use

Income generation, sex work

Safer substance use

Safe sex

HIV risk

Blankenship, 2015. J Acquir Immune Defic Syndr: 69;2

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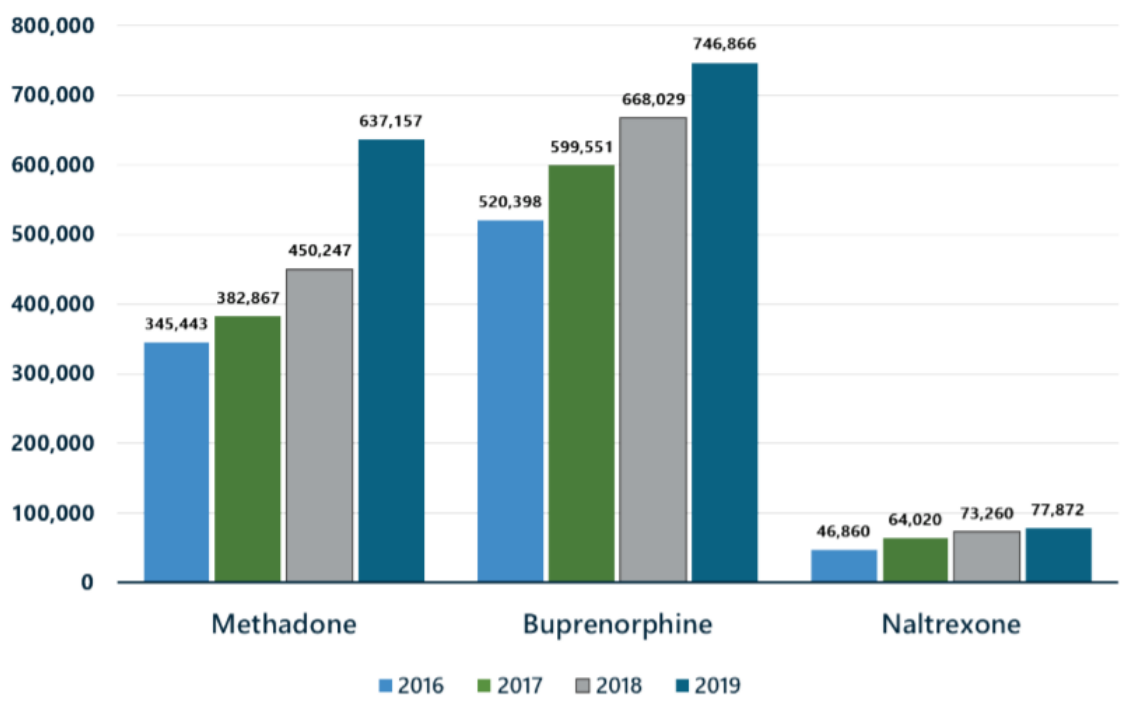
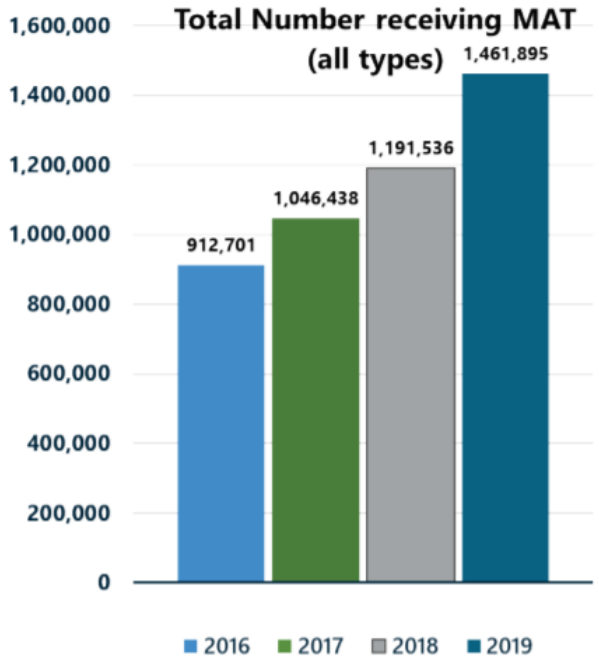
Some good news:

Treatment Gains: Number of Individuals Receiving Pharmacotherapy for Opioid Use Disorder (MAT)





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Substance Abuse and Mental Health Services Administration

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SUD treatment among women should be trauma-informed, gender-responsive, integrated w/ related services. It should offer strong therapeutic alliances and should account for women's specific needs and strengths.

Gender-responsive approach

Atmosphere

- Safe
- Collaborative
- Empowering
- Culturally-appropriate
- Understands interactions between gender, culture, substance use
- Attends to overlapping identities

Considerations

- Importance of relationships, role of families
- Role of socioeconomic factors and differences
- Prevalence and effects of IPV, other trauma
- Role of substance use in sexuality
- Patterns of co-occurring disorders

Examples

- Strong, consistent therapeutic alliances
- Integrated services
- Trauma-informed services
- Onsite childcare
- Supportive therapy
- Focused interventions for subgroups of women

SAMHSA TIPS 2013; Greenfield et al, Drug and Alcohol Dependence 2006

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Culturally-responsive care

- Assessments conducted in the client's preferred language.
- Assessments sensitive to the client's level of ethnic identity, including acculturation level.
- Treatment approach that reflects the client's cultural lens.
- Staff trained and proficient in cultural competencies.

HIV prevention in women who use drugs

- "One-stop shop"
  - harm reduction services and care for infections, SUD, mental health, trauma, IPV, social services, pre-natal care, reproductive health
- Additions to existing services
  - on-site childcare, more women staff, safe and discrete locations, mobile service
- Women-only hours, programs
- Target policies that disproportionately harm women, e.g.,
  - substance use as the sole factor in terminating parental rights, criminalization of sex work
- Expand economic empowerment, education, etc.

Blankenship, 2015. J Acquir Immune Defic Syndr: 69;2

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Key areas of ongoing need

- Understand and address:
  - heterogeneity of substance use among women (substance, race/ethnicity, gender identity)
  - use and barriers to treatment among LGBTQ+ and gender non-conforming persons
  - SUD among those who experience intersectional stigma (e.g., due to engaging in sex work or being part of cultural minority)
  - stigma around SUD and pregnancy
- Develop treatments that:
  - are trauma-informed and address gender-based violence
  - acknowledge women as parents and caregivers
- Integrate and expand treatment access
  - increased access to treatment of women's mental health, trauma, homelessness, infections (HIV, hepatitis C)
  - collaborative case management
- Address structural influences on engagement in treatment (sex trafficking, migration, criminal justice system involvement)

Meyer, 2019. Drug Alcoh Depend 197: 158-163

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In conclusion

- Women who use substances increase their use more rapidly and incur more medical and social consequences
- The gender gap in prevalence of SUD and overdose is narrowing
- Women are less likely than men to receive treatment for substance use and they face disparities in related conditions
- SUD treatment among women should be trauma-informed, gender-responsive, integrated w/ related services
- Gender-based power differences and violence/trauma affect women with SUD at all levels (individual, interpersonal, community, structural)
- Improving SUD treatment for women requires a gender-responsive, culturally competent approach and better understanding of SUD among specific subgroups of women

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Acknowledgment

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