Understanding the Whole Patient: Social Drivers of Health and Perinatal Substance Use

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Disclosures

• I am a paid consultant and equity holder in Origyn Solutions Inc. for intellectual property (two patents) unrelated to this work.



Learning objectives

- Recognize key social drivers that influence substance use during pregnancy.
- 2. Understand the impact of stigma and structural barriers on care engagement for pregnant individuals with substance use.
- 3. Explore patient-centered approaches to support pregnant individuals navigating substance use and social challenges.
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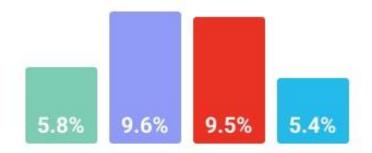
Substance Use Epidemic: A Public Health Crisis

- 40.3 million people (16.5 % of US population) had a substance use disorder (SUD) in 2020
 - 94 % did not receive any treatment
- COVID-19 worsened the overdose crisis
- 2021 opioid deaths: 80,000 (tenfold increase since 1999)
- Stimulant-related fatalities: 32,537



Past Month Substance Use Among Pregnant Women

Aged 15-44



Any Illicit Drug: 5.8%

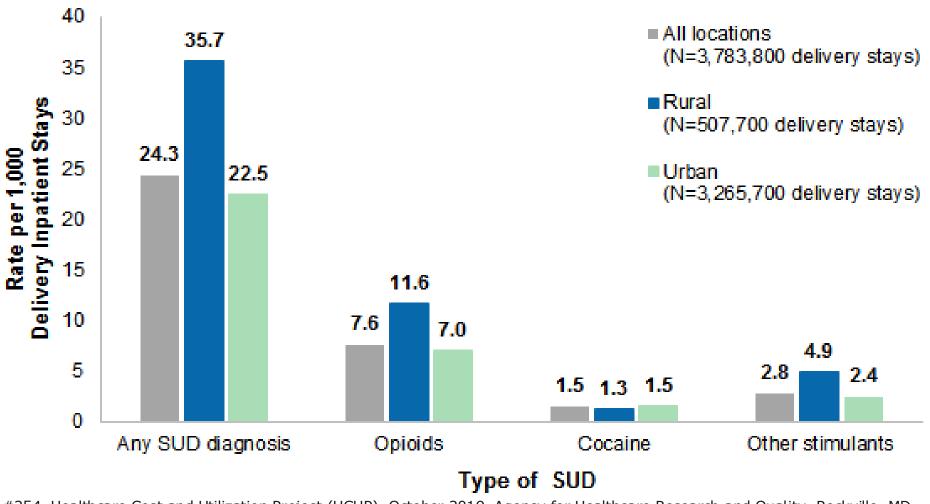
Tobacco Products: 9.6%

Alcohol: 9.5%

Marijuana: 5.4%

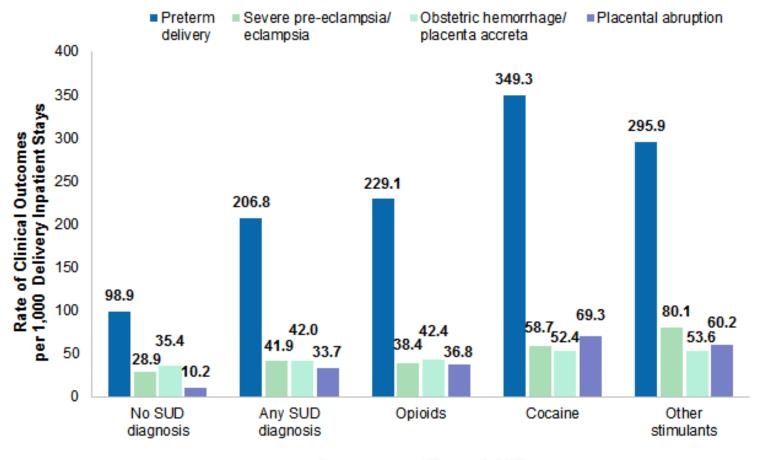


Substance use in pregnancy



Statistical Brief #254. Healthcare Cost and Utilization Project (HCUP). October 2019. Agency for Healthcare Research and Quality, Rockville, MD. www.hcup-us.ahrq.gov/reports/statbriefs/sb254-Delivery-Hospitalizations-Substance-Use-Clinical-Outcomes-2016.jsp.

Maternal Morbidity with SUD



Presence and Type of SUD



Leading Cause of Maternal Mortality

- Maryland
 - Accounted for 28% of pregnancy-associated deaths from 2011-2020, (114 maternal deaths)
 - 2nd leading cause of M&M in Maryland in 2022 (1st PPH)









Pandemic-related stress

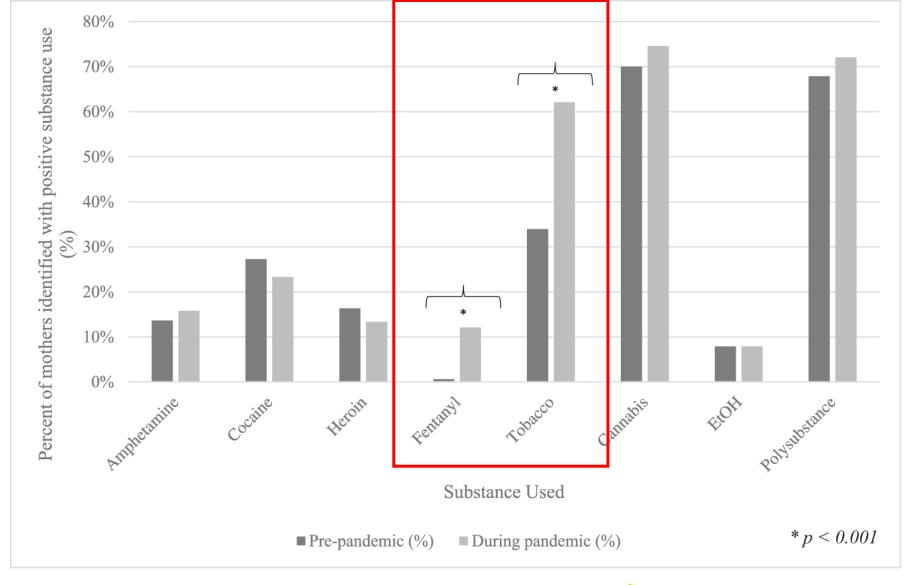
During the 1st year of the COVID-19 pandemic, global prevalence of anxiety and depression increased by 25% (World Health Organization).

Major factors for the increase were

social isolation resulting from the pandemic constraints on people's ability to work inability to seek support from loved ones minimal engagement in with communities







Pandemic-related SUD in pregnancy



Social Drivers of Health



Social and Economic Factors Drive Health Outcomes

Economic Stability	Neighborhood and Physical Environment	Education	Food	Community and Social Context	Health Care System
		Racism and	Discrimination		
Employment Income Expenses Debt Medical bills Support	Housing Transportation Safety Parks Playgrounds Walkability Zip code / geography	Literacy Language Early childhood education Vocational training Higher education	Food security Access to healthy options	Social integration Support systems Community engagement Stress Exposure to violence/trauma	Health coverage Provider availability Provider linguistic and cultural competency Quality of care
•	•	•	•	•	•

Health Outcomes: Mortality, Morbidity, Life Expectancy, Health Care Expenditures, Health Status, Functional Limitations

Social Drivers of Substance Use During Pregnancy

- Social drivers such as poverty, housing insecurity, racism, and access to care impact substance use risk
- Chronic stress from social adversity can lead to biological changes affecting pregnancy
- Disparities in maternal outcomes are pronounced among marginalized populations
- Environmental stressors contribute to substance use and poor outcomes

Reference: Girardi et al., Int J Equity Health (2023)



SDOH and OUD

 Investigate association between social drivers of health (SDOH) and the risk of maternal morbidity in patients with opioid use disorder (OUD) during pregnancy

 A retrospective chart review of pregnant patients with OUD who delivered at our university between 2017-2023



SDOH and OUD

- Severe maternal morbidity (SMM) was determined using 22 CDC indicators.
- Seven social determinants: insurance vulnerability, single marital status, unemployment, financial instability, transportation unreliability, lack of support person and history of incarceration.



Demographic	n=644
Maternal Characteristics	
Age at delivery, years (n=642)	30.4 ± 5.0
Race	
Black	332 (51.6%)
White	288 (44.7%)
Other/Mixed	24 (3.7%)
Hispanic or Latino ethnicity	18 (2.8%)
BMI (kg/m²) (n=600)	32.3 ± 10.8
Gravida	4.7 ± 2.9
Para	2.2 ± 1.6
History of Diabetes	90 (14.0%)
History of hypertension	215 (33.4%)
History of mood disorder	399 (62.0%)
Substance use	
Positive oxycodone screening	38 (5.9%)
Positive opiates screening	54 (8.4%)
Positive fentanyl screening	46 (7.1%)
OUD medications prescribed	295 (45.8%)
Methadone	161 (54.6%)
Buprenorphine	130 (44.1%)
Prenatal Care (n=435)	
Number of prenatal visits	6.1 ± 4.0

Prenatal Care (n=435)	
Number of prenatal visits	6.1 ± 4.0
Neonatal Outcomes	
Birth weight, grams (n=626)	2704.8 ± 776.3
1 minute APGAR score (n=620)	7.3 ± 2.2
5 minute APGAR score (n=623)	8.3 ± 1.7
NICU admission	346 (53.7%)
NAS requiring medication	267 (41.5%)
Delivery Characteristics	
Gestational age at delivery, weeks	36.7 ± 3.5
Length of stay, days	4.8 ± 5.9
ICU admission	11 (1.7%)

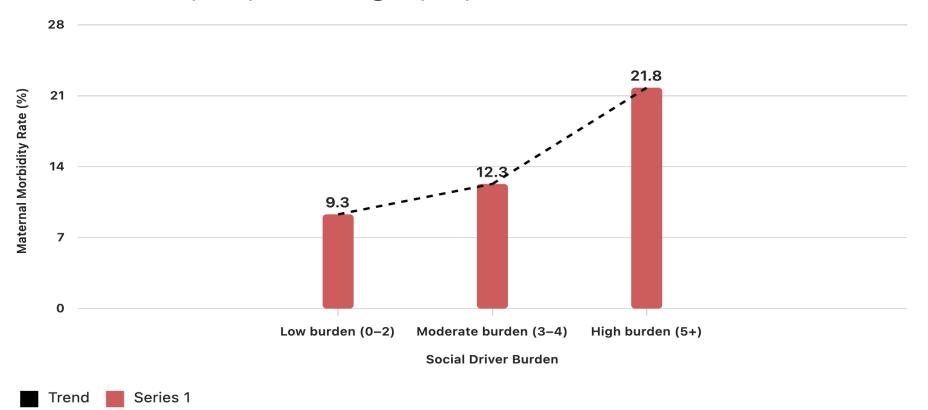


Social Determinants of Health	
Insurance Type (n=642)	
MA MCO/ Medicaid	567 (88.3%)
Commercial	20 (3.1%)
Other	55 (8.6%)
Marital status	
Single	511 (79.3%)
Married	102 (15.8%)
Other	31 (4.8%)
Employment status (n=643)	
Not employed	434 (67.5%)
Full time	79 (12.3%)
Part time/Other	130 (20.2%)
Financial Stability (n=189)	
WIC/SNAP/TCA/Unstable	85 (45%)
Stable	104 (55%)
Transportation (n=167)	
Unreliable	29 (17.4%)
Reliable	138 (82.6%)
Social Support at delivery (n=557)	
No support person	530 (95.2%)
Social support person	27 (4.8%)
Incarceration	
Incarcerated	19 (2.9%)
Not incarcerated	625 (97%)

Under review. Quackenbush J, Gourevitch R, Townsel et al. O&G.

SDH and OUD

• Tested dose-response by SDOH burden: low (0-2), moderate (3-4), and high (5+).



Under review. Quackenbush J, Gourevitch R, Townsel et al. O&G.

SDOH and SUDs in Pregnancy

In an analysis of reproductive aged women (15-49yo) 2016-2019:

• Pregnancy status was not associated with substance use or treatment seeking.

Past-month substance use was associated with

• high educational attainment, an **annual income <\$20,000**, a history of **criminality**, low religiosity, and having health insurance.

Past-month treatment-seeking behavior was associated with

• older age, an annual income >\$20,000, a history of criminality, and greater religiosity.



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Stigma and Structural Barriers to Care Engagement

- Stigma operates at individual, interpersonal, and institutional levels.
- Fear of child welfare involvement and criminalization deters care-seeking.
- Language and provider attitudes affect patient trust and engagement.
- Intersectionality amplifies stigma for people of color and those with SUD.

Weber et al., Substance Abuse and Rehabilitation (2021)







The Seven Types of Stigma

Public Stigma This happens when the public endorses negative stereotypes and prejudices, resulting in discrimination against people with mental health

conditions.

TYPE 1

TYPE 2

Self Stigma Self-stigma happens when a person with mental illness or substance-use disorder internalizes public stigma.

TYPE 3

Perceived Stigma Perceived stigma is the belief that others have negative beliefs about people with mental illness.

TYPE 4

Label Avoidance

This is when a person chooses not to seek mental health treatment to avoid being assigned a stigmatizing label. Label avoidance is one of the most harmful forms of stigma.

TYPE 5

Stigma by

Association Stigma by association occurs when the effects of stigma are extended to someone linked to a person with mental health difficulties. This type of stigma is also known as "courtesy stigma" and "associative stigma."

TYPE 6

Structural Stigma Institutional policies | Stigma or other societal This takes place structures that any time a health result in decreased professional allows opportunities stereotypes and for people with prejudices about mental illness mental illness to are considered negatively affect a structural stigma. patient's care.

TYPE 7

Health Practitioner



Poor quality of life agnosis
Delayed diagnosis





Our Words and Actions Matter

Be....

- Kind
- Respectful
- Supportive
- Caring
- Empathetic



SAY THIS

NOT THAT

Person with a substance use disorder

Person living in recovery

Person living with an addiction

Person arrested for drug violation

Chooses not to at this point

Medication is a treatment tool

Had a setback

Maintained recovery

Positive drug screen

Addict, junkie, druggie

Ex-addict

Battling/suffering from an addiction

Drug offender

Non-compliant/bombed out

Medication is a crutch

Relapsed

Stayed clean

Dirty drug screen



What We Say Matters

Person-First Language Guide

Addict, Addiction, Dirty



A Person with a Substance Use Disorder

Former Addict, Getting Clean



A Person in Recovery

Clean, Sober



Substance Free

Treatment is the Goal



Treatment is One Path to Recovery

Opioid Replacment, Opioid Management



Medication Assisted Treatment

Relapse



Recurrance, Return to Substance Use



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Patient-Centered Approaches to Support Pregnant Individuals

- Trauma-informed, family-centered care improves engagement and outcomes.
- Models include harm reduction, peer support, and integrated behavioral health.
- Role of doulas, peer navigators, and community health workers is critical.
- Centering lived experience drives equity in care delivery.
- Silverman & Benyo, CHCS (2024)



Harm Reduction is Compassionate Care

HARM REDUCTION SERVICES

















- Incorporates a spectrum of strategies
- Meets people "where they are" but doesn't leave them there
- Applies evidence-based interventions to reduce negative consequences:
 - Medication for opioid use disorder (MOUD)
 - Naloxone rescue kits
 - Syringe exchange programs
 - PrEP (Pre-exposure prophylaxis for HIV)
 - HEP C testing /HIV testing & education on prevention/treatment
- Works to elicit <u>ANY POSITIVE CHANGE</u> based on individual patient's need, circumstance, and readiness to change

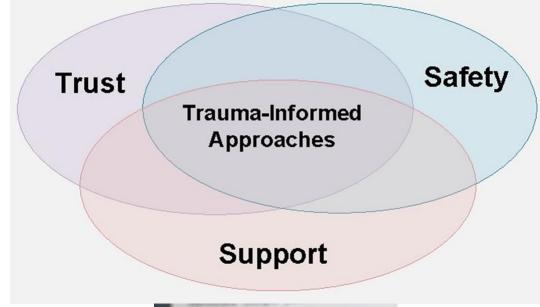


Trauma-Informed Care

of WOMEN seeking treatment for addiction report HISTORY OF PHYSICAL/SEXUAL ASSAULT

WOMEN with Substance Use Disorders are more than

> more likely to suffer from PTSD





Mental Health and SUDs

80% of women with SUD have a lifetime history of trauma

Substance Use 30-60% of women with PTSD have SUD

Trauma SDOH



PTSD

Depression Anxiety PTSD and depression 60% overlap



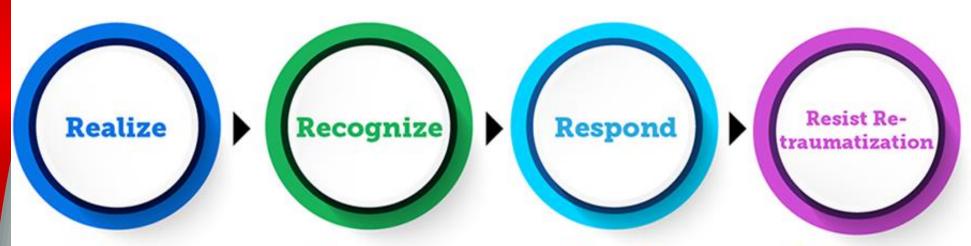
Try this....not that

- Instead of...
 - "Why is this person acting like that?"
- Try.....
 - "What happened to this individual to make them respond in this way?"





The Four R's of Trauma-Informed Care



Realize the widespread impact of trauma and understand potential paths for recovery

Recognize

the signs and symptoms of trauma in clients, families, staff, and others involved with the system

Respond

by fully integrating knowledge about trauma into policies, procedures, and practices

Resist

re-traumatization of children, as well as the adults who care for them



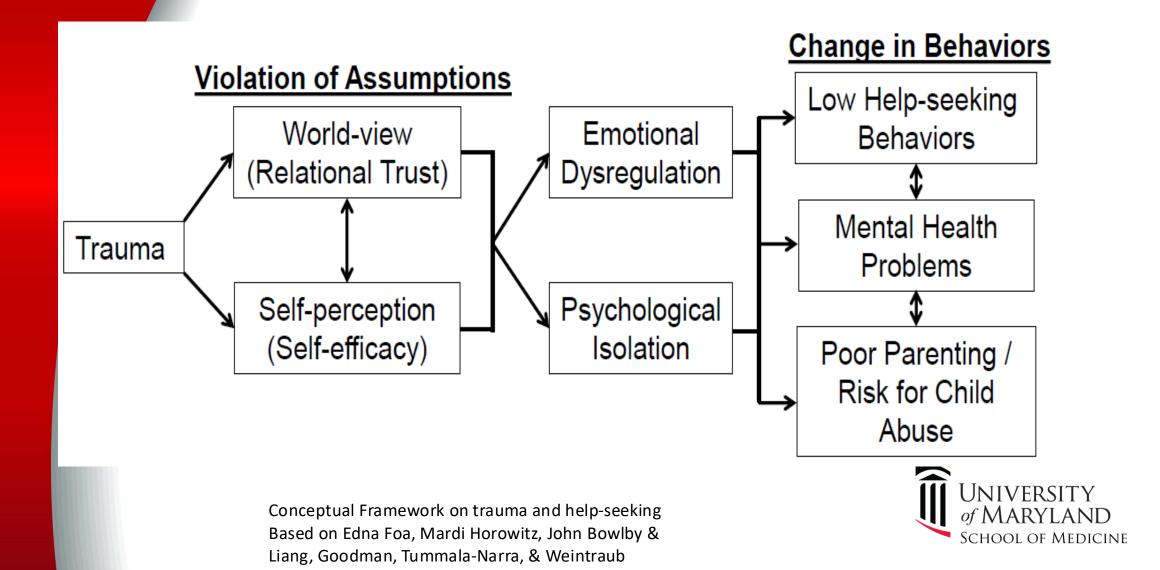
Core Principles of Trauma Informed Care

- Understand Trauma is prevalent
- Create Safety
- Cultural Humility and Responsiveness
- Trustworthiness and Dependability
- Collaboration and Empowerment
- Compassion & Empathy
- Self-care to prevent burn-out

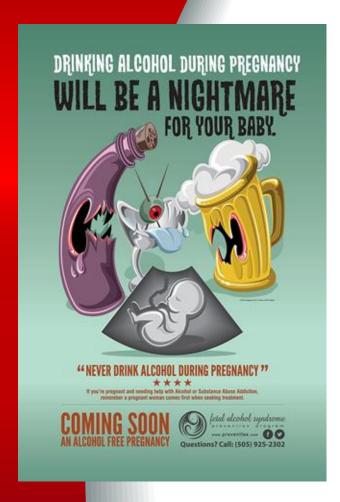


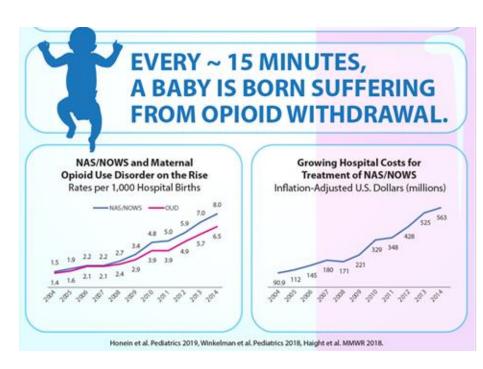


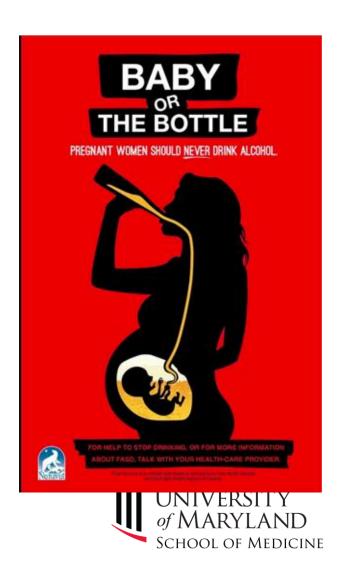
Trauma changes trust, functioning, and help seeking



Stigma and TIC







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Interdisciplinary Collaboration to Improve Outcomes

- Integrated care teams are essential: OB/GYN, addiction psychiatry, neonatology, social work.
- Collaboration with legal systems, housing services, and behavioral health improves continuity.
- Interdisciplinary clinics show promise but face implementation challenges.
- Case studies highlight successful models and lessons learned.

McKinney et al., Int J Mental Health Addiction (2023)



Perinatal Substance Use Clinics

- SUPPORT Substance Abuse in Pregnancy and Parenting Outpatient Recovery and Treatment
- **PFF:** Partnering for the Future Clinic
- Services provided include:
 - Medication for opioid use disorder (MOUD)
 - Peer recovery support services
 - Childbirth preparation
 - Parenthood planning
- OUD most prevalent SUD managed

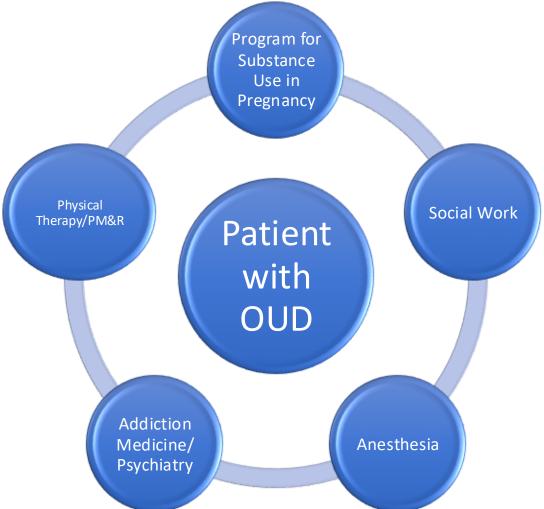


Collaborative Care



Education



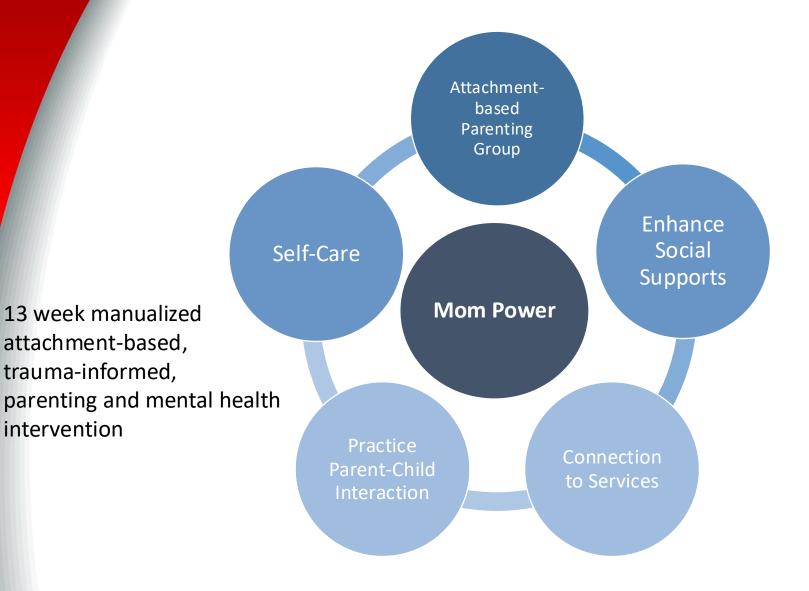




Doula support



Mom Power Group Intervention



13 week manualized

attachment-based,

trauma-informed,

intervention

Trust

Help-Seeking

Emotion-regulation

Coping Skills

Emotional Attunement



Treatment Goals

- Incorporate patient's goals when developing a treatment plan:
 - Current interest in treatment
 - Work, community, justice supports
 - Understand risk/benefits of approaches
 - Agrees to clinic contract, safety precautions
 - Adherence
 - Availability of wrap-around care



Conclusions

- 1. Social drivers of health influence substance use during pregnancy and perinatal outcomes
- 2. Stigma and other structural barriers impede patient engagement
- 3. Patient-centered approaches to support pregnant individuals navigating substance use and social challenges, such as trauma-informed care are critical
- 4. Interdisciplinary collaboration to improve maternal and infant outcomes is promising strategy





Questions?

