Opioid Use Disorder in the Perinatal Population: Reviewing Evidence-Based Care Models and Best Practices

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Disclosure Information

- Presenter 1: Kaitlan Baston
  No Disclosures
- Presenter 2: Valerie Ganetsky
  No Disclosures
- Presenter 3: Iris Jones
  No Disclosures
- Presenter 4: Lindsay Wilson
  No Disclosures

Non-Clinical Disclosures

- Land Acknowledgment: Being a virtual conference we are all on stolen land of many tribes. The speakers are presenting from original land of the Lenape tribe. - https://native-land.ca/

- Gender - transmen/gender non-binary/gender fluid folks can become pregnant

Learning Objectives

1. Describe best practices for treatment of substance use disorder (SUD) during the perinatal period.

2. Describe lessons learned from a comprehensive program for perinatal substance use.

1. Describe existing disparities in perinatal substance use screening and treatment and ways to mitigate disparities.

2. Conduct a systems-based analysis of each participant's own health care system to identify strengths and barriers for creating a successful comprehensive perinatal substance use treatment program.

Workshop Outline

1. Introductions

1. Rapid fire informational component (Petcha Kucha method)
   a. Overview of current best practice models for perinatal SUD treatment
   b. Addressing disparities in care
   c. Review of Cooper EMPOWR Program model
   d. Lessons learned

1. Interactive interdisciplinary panel discussion

1. Small group SWOT analysis activity

Introductions

Who we are




What we do

Cooper Center for Healing

EMPOWR Program

Empowering Mothers to Parent & Overcome with Resilience

Best Practice Models

Valerie Ganetsky, PharmD, MSc

Current state of perinatal substance use treatment

50%

of pregnant women with OUD receive medication[1,2]

25-30%

of facilities offer programs for pregnant/parenting women[3,4]

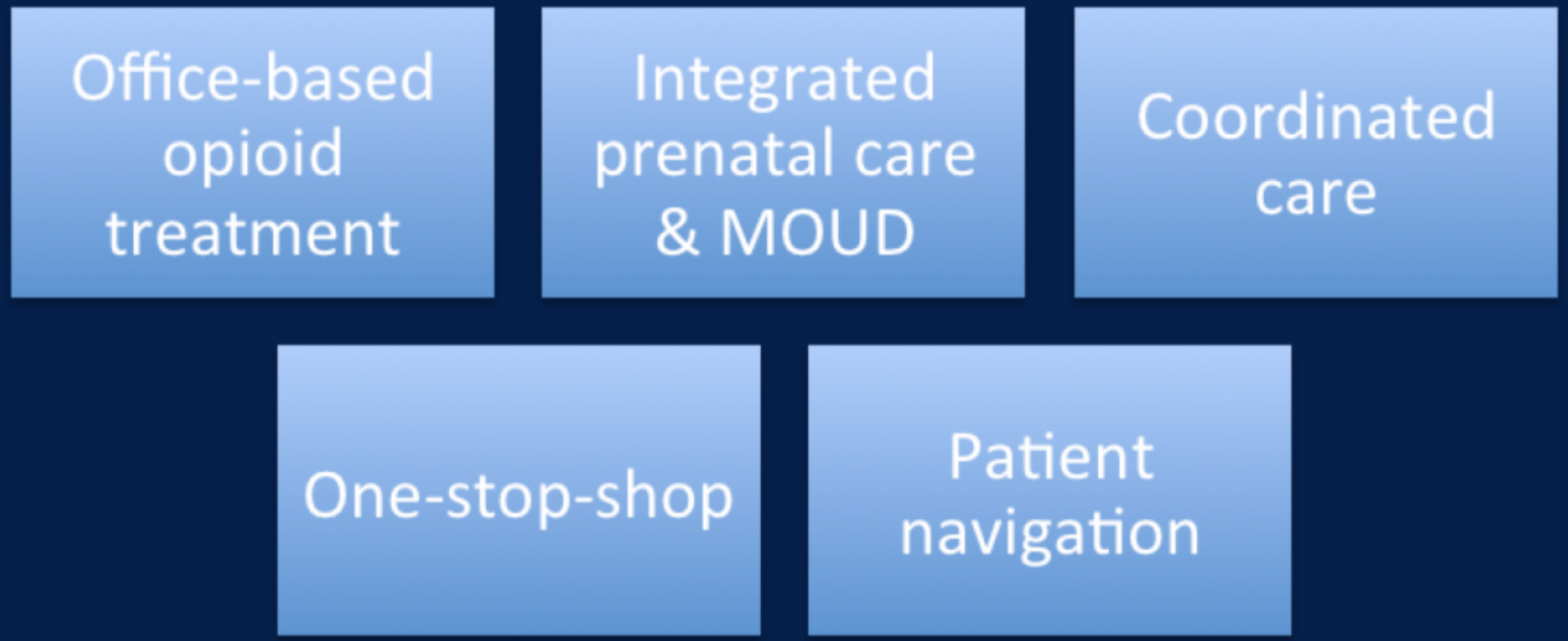
[1]Krans EE, Kim JY, James AE, Kelley D, Jarlenski MP. Medication-assisted treatment use among pregnant women with opioid use disorder. Obstet Gynecol. 2019;133(5):943-51, [2]Short VL, Hand DJ, MacAfee L, Abatemarco DJ, Terplan M. Trends and disparities in receipt of pharmacotherapy among pregnant women in publicly funded treatment programs for opioid use disorder in the United States. J Subst Abuse Treat. 2018;89:67-74, [3]Meinhofer A, Hinde JM, Ali MM. Substance use disorder treatment services for pregnant and postpartum women in residential and outpatient settings. J Subst Abuse Treat. 2020;110:9-17, [4]Hadland SE, Jent VA, Alinsky RH, Marshall BDL, Mauro PM, Cerda M. Opioid use disorder treatment facilities with programs for special populations. Am J Prev Med. 2020;59(3): e125–e133.

What does comprehensive care look like[5]?

- Interdisciplinary team
  - Addiction provider, OB/GYN, pediatrics, social work, mental health providers
- Medications for opioid use disorder (MOUD)
- Mental health treatment and support
- Family planning services
- Parenting education and support
- Trauma-informed care
- Linkage to social services
- Prenatal and postpartum care
  - Neonatal opioid withdrawal syndrome counseling, breastfeeding support

[5]Substance Abuse and Mental Health Services Administration. Clinical Guidance for Treating Pregnant and Parenting Women With Opioid Use Disorder and Their Infants. HHS Publication No. (SMA) 18-5054. Rockville, MD: Substance Abuse and Mental Health Services Administration, 2018.

Models of care for perinatal substance use: Overview[6]



[6]Joshi C, Skeer MR, Chui K, et al. Women-centered drug treatment models for pregnant women with opioid use disorder: A scoping review. Drug and Alcohol Dependence. 2021;226:108855.

Models of care for perinatal substance use: Best practices[5,6]

1	**Access**	• Co-location of services (OB/GYN, pediatrics, mental healthcare) • Providing transportation, childcare • Education on pregnancy & parenting
2	**Care coordination**	• Interprofessional collaboration • Referrals to health and social services • Communication about patients' medical/social needs and priorities
3	**Quality of care**	• Group visits • Non-judgemental care • Trusting patient-provider relationships

[5]Substance Abuse and Mental Health Services Administration. Clinical Guidance for Treating Pregnant and Parenting Women With Opioid Use Disorder and Their Infants. HHS Publication No. (SMA) 18-5054. Rockville, MD: Substance Abuse and Mental Health Services Administration, 2018, [6]Joshi C, Skeer MR, Chui K, et al. Women-centered drug treatment models for pregnant women with opioid use disorder: A scoping review. Drug and Alcohol Dependence. 2021;226:108855.

Models of care for perinatal substance use: Outcomes[6-8]

- Higher retention rates
- Decreased substance use
- Improved perinatal/birth outcomes
- Increased patient satisfaction

[6]Joshi C, Skeer MR, Chui K, et al. Women-centered drug treatment models for pregnant women with opioid use disorder: A scoping review. Drug and Alcohol Dependence. 2021;226:108855, [7]Ashley OS, Marsden ME, Brady TM. Effectiveness of substance abuse treatment programming for women: a review. Am J Drug Alcohol Abuse. 2003;29(1):19-53, [8]Hser YI, Evans E, Huang D, Messina N. Long-term outcomes among drug dependent mothers treated in women-only versus mixed-gender programs. J Subst Abuse Treat. 2011;41(2):115-123.

Understanding Racial Disparities

Iris Jones, LPC, LCADC, NCC, CCS

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Racial Disparities Exist

Significant racial disparities exist in access, treatment retention, screening, testing and reporting to child welfare.

Ferguson vs. City of Charleston[9]

Medical University of South Carolina

- Testing women *suspected* of cocaine use.
- Reporting the results to law enforcement officials.
- 30 women were arrested, 29 were black
- Later, the policy was amended so those patients who tested positive were given a choice between being arrested and receiving drug treatment.

[9]Ferguson v. Charleston, 532 U.S. 67 (2001)https://www.aclu.org/other/ferguson-v-city-charleston-social-and-legal-contexts

Disparities in Treatment Access[10,11]

White Americans are 35x more likely to be prescribed buprenorphine than Black Americans

The dominant use of buprenorphine to treat whites occurred at the same time opioid overdose deaths were rising faster for blacks than for whites.

[10]Lagisetty PA, Ross R, Bohnert A, Clay M, Maust DT. Buprenorphine Treatment Divide by Race/Ethnicity and Payment. *JAMA Psychiatry.* 2019;76(9):979–981. doi:10.1001/jamapsychiatry.2019.0876

[11]Spencer MR, Warner M, Bastian BA, Trinidad JP, Hedegaard H. Drug overdose deaths involving fentanyl, 2011–2016. National Vital Statistics Reports; vol 68 no 3. Hyattsville, MD: National Center for Health Statistics. 2019.

Perinatal Access[12]

There are racial and ethnic disparities in the use of MOUD during pregnancy.

Large population-level sample cohort study of 5247 women with OUD who delivered a live infant — black non-Hispanic and Hispanic women were significantly less likely to receive MOUD.

Table 1. Characteristics of Pregnant Women With Opioid Use Disorder by Race/Ethnicity[a]

Characteristic	No. (%) (N = 5247) White non-Hispanic (n = 4551)	Black non-Hispanic (n = 234)	Hispanic (n = 462)	P value
Demographic characteristics				
Age, y				
≤25	1283 (28.2)	71 (3.3)	136 (29.4)	
26-34	2682 (58.9)	123 (52.6)	247 (52.6)	.02
≥35	586 (12.9)	40 (17.1)	79 (17.1)	
Educational level				
High school or less	2385 (52.4)	127 (54.3)	300 (64.9)	<.001
Some college or more	2166 (47.6)	107 (45.7)	162 (35.1)	
Enrollment in Medicaid (MassHealth) during the month of delivery	4065 (89.3)	215 (91.9)	426 (92.2)	.08
Married	800 (17.6)	36 (15.4)	78 (16.9)	.66
Rural vs urban residence at time of delivery	512 (11.3)	NA[b]	19 (4.1)	<.001
Psychosocial characteristics and health care use during pregnancy				
Anxiety diagnosis	1135 (24.9)	47 (2.1)	105 (22.7)	.16
Depression diagnosis	1270 (27.9)	63 (26.9)	149 (32.3)	.13
Any opioid prescription in last 3MD (excluding buprenorphine)	172 (3.8)	NA[b]	NA[b]	.01
Incarcerated in prison or jail[c]	773 (17.0)	41 (17.5)	62 (13.4)	.14
Homeless[c]	1067 (23.5)	70 (29.9)	118 (25.5)	.05
≥3 ED visits	798 (17.5)	58 (24.8)	86 (18.6)	.02
Adequacy of prenatal care				
Less than adequate	1884 (41.4)	103 (44.0)	215 (46.5)	.16
Adequate	1257 (27.6)	65 (27.8)	107 (23.2)	
Intensive	1410 (31.0)	66 (28.2)	140 (30.3)	
Opioid-related variables during pregnancy				
Enrolled in public addiction treatment program for opioid misuse	1268 (27.9)	53 (22.7)	97 (21.0)	.002
OUD diagnosis	3055 (67.1)	104 (44.4)	248 (53.7)	<.001
Overdose event	87 (1.9)	NA[b]	NA[b]	.48
Medication for OUD				
Buprenorphine	1617 (35.5)	NA[b]	96 (20.8)	<.001
Methadone	1265 (27.8)	59 (25.2)	110 (23.8)	
Both	253 (5.6)	NA[b]	22 (4.8)	
None	1416 (31.1)	126 (53.9)	234 (50.7)	
NAS diagnosis	2465 (54.2)	136 (58.1)	288 (62.3)	.002

Abbreviations: 3MD, 3 months before delivery; ED, emergency department; NA, not available; NAS, neonatal abstinence syndrome; OUD, opioid use disorder.

[a] Among pregnant women who delivered a live infant between October 1, 2011, and December 21, 2015, in Massachusetts.

[b] Values of fewer than 11 deliveries were not included in accordance with privacy rules.

[c] At any time from October 1, 2011, to December 31, 2015.

[12]Schiff DM, Nielsen T, Hoeppner BB, et al. Assessment of Racial and Ethnic Disparities in the Use of Medication to Treat Opioid Use Disorder Among Pregnant Women in Massachusetts. JAMA Netw Open. 2020;3(5):e205734. doi:10.1001/jamanetworkopen.2020.5734

Testing & Reporting[13,14]

Testing

A 2007 study of 8,487 women found that African American women and their newborns were 1.5x more likely than others to be tested for substances, even though they were no more likely to have a positive result.

Reporting

Researchers found that 15.4% of white women and 14.1% of African American women used drugs during pregnancy, but African American women were 10x more likely to be reported to the authorities .

[13]Kunins, H. V., Bellin, E., Chazotte, C., Du, E., & Arnsten, J. H. (2007). The effect of race on provider decisions to test for illicit drug use in the peripartum setting. *Journal of women's health (2002), 16*(2), 245–255.

[14]Chasnoff IJ, Landress HJ, Barrett ME. The prevalence of illicit-drug or alcohol use during pregnancy and discrepancies in mandatory reporting in Pinellas County, Florida. N Engl J Med. 1990 Apr 26;322(17):1202-6.

The Washington Post

Crack Babies: The Worst Threat Is Mom Herself

By Douglas J. Besharov

LAST WEEK in this city, Greater Southeast Community Hospital released a 7-week-old baby to her homeless, drug-addicted mother even though the child was at severe risk of pulmonary arrest. The hospital's explanation: "Because [the mother], demanded that the baby be released."

The hospital provided the mother with an apnea monitor to warn her if the baby stopped breathing while asleep, and trained her in CPR. But on the very first night, the mother went out drinking and left the child at a friend's house—without the monitor. Within seven hours, the baby was dead. Like Dooney Waters, the 6 year-old living in his mother's drug den, whose shocking story was reported in The Washington Post last week, this child was all but abandoned by the authorities.

Children of the Opioid Epidemic

In the midst of a national opioid crisis, mothers addicted to drugs struggle to get off them — for their babies' sake, and their own.

By JENNIFER EGAN MAY 9, 2018

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[15]Egan, Jennifer, https://www.nytimes.com/2018/05/09/magazine/children-of-the-opioid-epidemic.html

Cooper EMPOWR Program

Kaitlan Baston, MD MSc DFASAM
Lindsay Wilson, LPN

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- 635 bed tertiary care, level 1 trauma center
- Academic teaching health system:
  - GME: 350 residents
  - UME: Cooper Medical School of Rowan University
- ED >82,000 visits annually
- 5-15 overdoses a day
- Approximately 64 endocarditis cases per quarter
- *>2000 deliveries per year*

Center for Healing Timeline

2015 FOUNDING YEAR

OUTREACH CLINIC
AT URBAN HEALTH INSTITUTE
(NICHOLSON FOUNDATION GRANT)

2019 MILESTONE YEAR

BUPE FIRST EMS

DMHAS CENTER OF EXCELLENCE

MEDICATION-ASSISTED TREATMENT
CENTERS OF EXCELLENCE

2016

PERINATAL PROGRAM

X-WAIVER TRAINING
FOR ED FACULTY &
RESIDENTS

2017

INTEGRATED
HIV/OUD CLINIC

ANNUAL ADDICTION
CURRICULUM (OB/GYN,
PSYCHIATRY, & ED
RESIDENCIES)

DMHAS
PERINATAL

2018

INPATIENT CONSULT SERVICE;
BUPE FIRST ED

X-WAIVER TRAINING FOR OB/
GYN FACULTY & RESIDENTS;
& MULTIDISCIPLINARY
FACULTY/STAFF/RESIDENTS

HRSA EDUCATION;
SAMHSA LONGITUDINAL
CMSRU EDUCATION

2020

LOW-BARRIER
WALK-IN CLINIC LAUNCH
DURING COVID–19
PANDEMIC

HRSA ADDICTION
MEDICINE FELLOWSHIP

2021

RECOVERY VILLAGE
CHERRY HILL AT COOPER;
AUD–ED

KEY:
BLUE = PROGRAMS/SERVICES
RED = EDUCATION
GREEN = GRANT FUNDING

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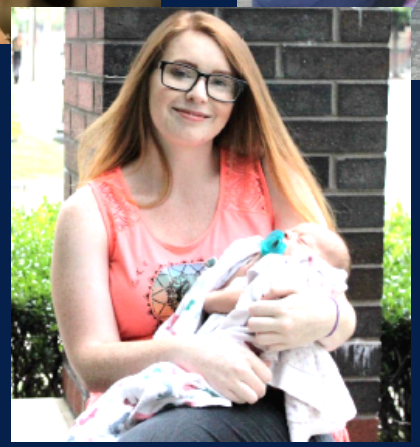
EMPOWR: Perinatal SUD Program

The Cooper Center for Healing EMPOWR Program
Empowering Mothers to Parent and Overcome with Resilience



Cooper Center for Healing

EMPOWR Program

Empowering Mothers to Parent & Overcome with Resilience

- Addiction Care
- Mother & Infant Medical Treatment
- Medication Coverage
- Emergency Housing
- Behavioral Health
- Collaborative Care
- Transportation
- Essential Baby Items
- Innovative Neonatal Withdrawal Treatment

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Group Medical Visit Model

Once Weekly 2 Hour Group with Medical Visits:

- Up to 20 women + children
- Therapist led psychoeducation
- Peer Support
- Navigator, Nurse, Pharmacist support
- 26-week education curriculum
- Physician medical visits
- Med Ed: fellows, residents, students
- Baby items, clothes, food available

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[16]Ganetsky VS, Heil J, Yates B, et al. A low-threshold comprehensive shared medical appointment program for perinatal substance use in an underserved population. J Addict Med. 2021. doi: 10.1097/ADM.0000000000000912.

Low Barrier Access

Low Barrier: Walk-In Access, Expanded Hours, Community Center Philosophy

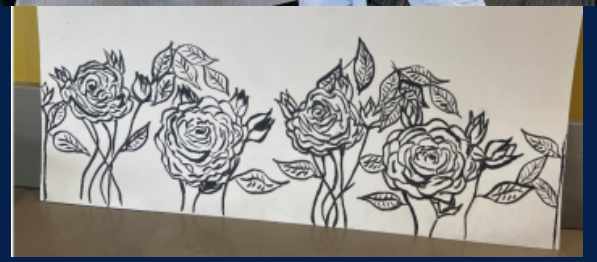
Integrated Behavioral Health: Group therapy, family therapy, trauma therapy, EMDR

Group Medical Visits

Nurse Care & Protocols

Medical Assistant Visits

Creative Wellness Initiative



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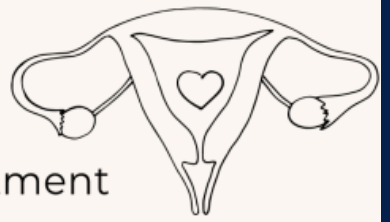
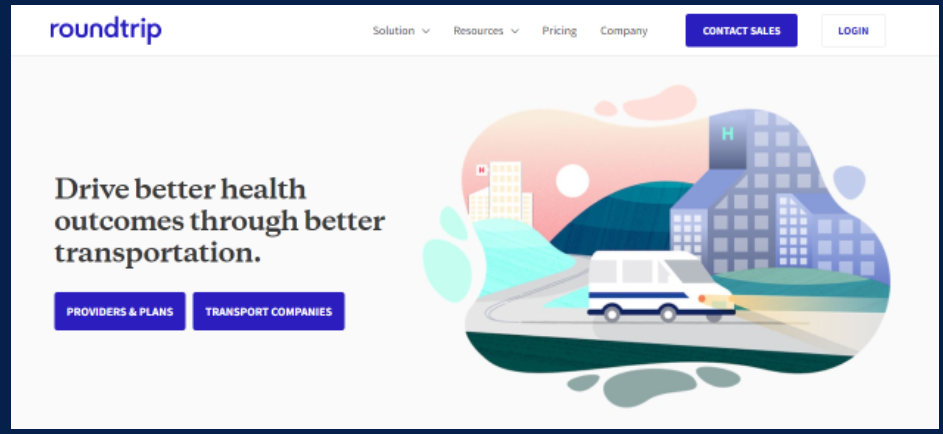
Social Determinants of Health

Services Offered



- Comprehensive Medical Care
- Medication for Addiction Treatment
- Individual, Group, & Family Therapy
- Medication Cost Coverage
- Emergency Housing Support
- Transportation Assistance
- Care Coordination
- Peer Recovery Support
- Essential Baby Items



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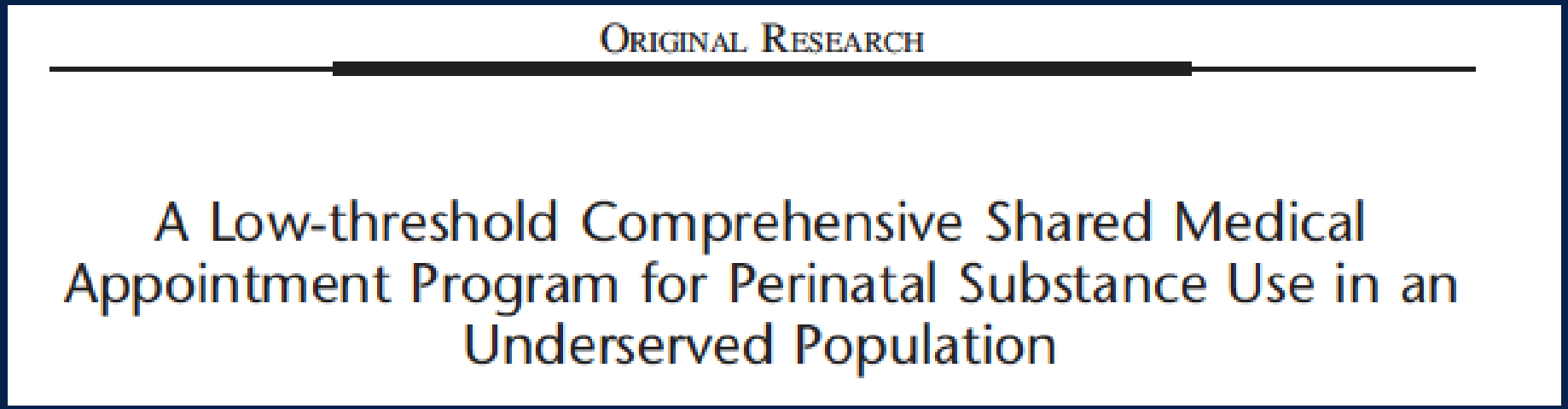
Results of Our Program[16]


ORIGINAL RESEARCH

A Low-threshold Comprehensive Shared Medical Appointment Program for Perinatal Substance Use in an Underserved Population

High retention rates: 78 % - 6 months, 66% - 1 year, 48 % - 2 years

***

Nearly 90% of all urine tox results were negative for non-prescribed opioids

***

Those enrolled after initiation of comprehensive wraparound services = lower hazard of program disengagement

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[16]Ganetsky VS, Heil J, Yates B, et al. A low-threshold comprehensive shared medical appointment program for perinatal substance use in an underserved population. J Addict Med. 2021. doi: 10.1097/ADM.0000000000000912.

Final Takeaways/Summary/Lessons Learned

- Universal screening and standardized policies combat bias and racial disparities in testing and reporting
- Pregnant/parenting women need comprehensive treatment services to match the complexity and unique challenges of treating SUD in this population
- Integrated Behavioral, Addiction, and Perinatal Medical Care is ideal
- Addressing SDOH and minimizing gaps in care improves outcomes
- Evidence-based comprehensive models increase retention rates, decrease substance use, improve perinatal/birth outcomes and increase patient satisfaction

References

1. Krans EE, Kim JY, James AE, Kelley D, Jarlenski MP. Medication-assisted treatment use among pregnant women with opioid use disorder. Obstet Gynecol. 2019;133(5):943-51.
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