Perinatal Substance Use Disorders Treatment

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North Carolina has been at the forefront of offering treatment for perinatal substance use disorders for over 25 years. Wraparound services, understanding of the fourth trimester, the importance of medication-assisted treatment, and learning from past false predictions regarding illicit prenatal exposure contribute to a nurturing, supportive approach for the mother, child, and families.

North Carolina has been at the forefront of offering treatment for perinatal substance use disorders for over 25 years. In 1992, in the midst of the national crack cocaine epidemic, 6 North Carolina agencies were awarded federal Substance Abuse Prevention and Treatment Block Grant funds to develop substance use disorder (SUD) treatment services and supports for pregnant and postpartum women and their children. Those programs set the foundation for what are now the North Carolina Perinatal and Maternal Substance Use and CASAWORKS for Families initiatives. The initiatives include 25 programs across the state serving women and their families in residential and outpatient settings with evidence-based practices. While the substances that are most commonly used have shifted 25 years later, much of what we learned from those first programs is still effective today. The continued success of the perinatal programs and related efforts over the years has been due to the committed professionals at the local and state level with unwavering focus on best outcomes for women and their children.

The original 6 programs were intended to offer distinctly different SUD treatment from what was typically available at the time, which had inherent barriers for pregnant and parenting women struggling with SUD. These projects offered comprehensive, gender-responsive, culturally appropriate residential and outpatient treatment that focused on the unique needs and circumstances of pregnant and parenting women. The significant outcomes of the projects were in line with the national data (see Figure 1). These projects contributed to the body of knowledge regarding the effectiveness of the treatment approaches with this population.

The initial evaluation outcomes illustrated enduring lessons that are consistent with current annual evaluations. These outcomes indicate that engagement and retention in treatment is more likely when services are tailored to the realities of pregnant and parenting women's lives, in women-only settings. These realities include attending to child care, transportation, parenting skills, and relationship issues including experiences of domestic violence. In 1990, the American Academy of Pediatrics (AAP) and the American Public Health Association affirmed that women with SUDs who are pregnant and parenting require non-punitive access to comprehensive care that meets their unique needs [1]. The AAP further affirmed that punitive measures taken toward pregnant women (eg, criminal prosecution and incarceration) have no proven benefits for infant health [1]. Since that time, over 20 national and international organizations have published statements that reiterate the need to treat SUDs as a medical illness, outline the key services needed, and warn against the prosecution and punishment of pregnant women who use substances [1-8]. Thus, for over 25 years, scientific evidence consistently demonstrates that reducing barriers to care for women is essential, because if a woman does not show up or stay for treatment, she, her children, and her family will not reap the benefits of treatment.

One of the drivers of this approach to perinatal and maternal SUD treatment is the perspective that the best outcomes for the women create the best outcomes for the pregnancy and her children, and vice versa; the best outcome for infants and older children is to have a mother in recovery, with the parenting skills to care for them. The treatment is intended to support her in meeting the requirements of this fundamental relationship while caring for herself in recovery. Treatment provides the essential building blocks to help women heal from the traumas of childhood, learn new ways to manage emotions, find a path to employment, and build healthy relationships with themselves, their children, their family, and their community. The structure of treatment allows the roots of recovery to take a firm foundation and a woman's vision of a multi-faceted healthy life to blossom. Treatment works best when the focus encompasses more than just the SUD itself or the substance exposure of the infant. Like other chronic diseases, SUD requires ongoing, whole-health management for lasting recovery. A treatment

Electronically published January 6, 2020.

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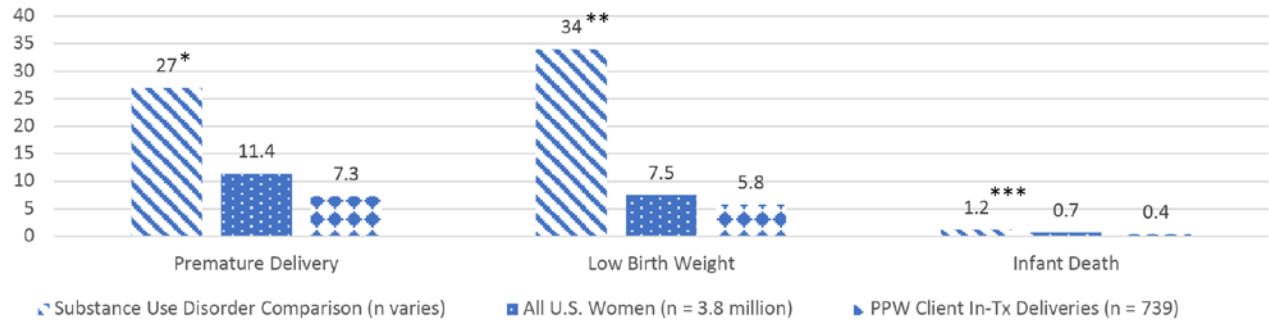
0029-2559/2020/81108

FIGURE 1.
Pregnant and Parenting Women Demonstration Site Pregnancy Outcomes Outcome Per 100 Live Births



*n = 4,095 from 18 recent hospital-based studies of outcomes for cocaine-using women
** n =11,561 from 18 recent hospital-based studies of outcomes for cocaine-using women
*** n = 10,816 previous pregnancies of RWC/PPW clients, as reported at treatment admission

Source. Caliber Associates, 2003.

focus on the mother-infant dyad (the relationship between mother and child), with an eye toward parenting outcome, can help facilitate resilient developmental outcomes for the child and long-term health of the mother.

Effects of SUD on the Child

A fundamental question that providers and caregivers want answered is, "How does substance exposure in pregnancy affect the child?" To date, the most definitive data available is regarding alcohol and tobacco exposure. We know that cigarette smoking is the leading preventable cause of pregnancy-related morbidity and mortality, and prenatal alcohol exposure is the leading preventable cause of developmental and intellectual disabilities [9-11]. However, collective data on prenatal opioid exposure seems not to support short-term impact on the infant or young child [12]. When longer-term outcomes are examined, it is clear that studied children with prenatal opioid exposure are also more likely to be raised in poverty than their non-opioid-exposed counterparts [12]. Further, in many studies, poverty exposure drives many of the outcomes observed. It is critical that providers, policymakers, and researchers do not repeat the mistakes of the past, in which it took decades of carefully controlled research to dispute the damaging misinformation that was disseminated about prenatal cocaine exposure. It was learned through careful longitudinal research of prenatal crack cocaine exposure in utero that what mattered most for long-term child outcomes was not the in-utero exposure, but rather the quality of the postnatal environment. It was the child's environment in their upbringing that had the most significant impact on long-term health and functioning outcomes [13, 14]. Such a finding underscores the need for mothers and fathers to have access to the highest quality treatment for their SUD so that that they can provide the best physical and emotional home environment for their children.

Pregnant and parenting women struggling with SUD present with complex needs, as evidenced by the 2018 data from the North Carolina perinatal programs (see Figure 2). It was known early on that there was a correlation between SUD and traumatic experiences. On average, 55% of women entering the North Carolina Perinatal and Maternal Substance Use and CASAWORKS for Families programs self-disclosed at the time of entry into treatment as having had traumatic experiences (internal data, Green SL, North Carolina Perinatal Maternal Substance Use and CASAWORKS Initiative Annual Cross Site Evaluation Reports, 2018). Important work by Stephanie Covington emphasized the connection between trauma and substance use and the need to treat them jointly, particularly for women, moving away from the idea of first getting sober and then addressing the trauma, as that recipe often led to a return to use [15]. We have also learned the significant correlation between adverse childhood experiences (ACEs) and the probability of experiencing a SUD through the ACEs study by Dube, Felleti, and coauthors [16]. These keys to understanding the origin of distress that contributes to problematic substance use help to address and heal the current wounds and pave the way for long-term recovery.

The Fourth Trimester

During pregnancy, there is a keen focus on the mother's health and well-being. That focus should not end after delivery, as we know that a baby's health and well-being depend fully on the health and well-being of the mother and caregivers. In perinatal treatment, we know that the fourth trimester matters. The fourth trimester is defined as the first 3 months after delivery when women's bodies change drastically and newborns develop rapidly. The term acknowledges that the effects of pregnancy and delivery on a woman's body do not end with childbirth and that the first 3 months of life contain critical developmental milestones. By viewing this period as

an extension of pregnancy, the intent is for practitioners to ensure women and children get the appropriate care.

To decrease complications in the early postpartum period, the American College of Obstetricians and Gynecologists recommends that care in the fourth trimester include: 1) regular ongoing care, instead of the traditional single postpartum visit; 2) care that is individually tailored for each woman; 3) first postpartum visit within 3, not 6, weeks of birth; and 4) a final comprehensive postpartum visit no more than 12 weeks after birth.

Women need ongoing support in this delicate postpartum period, including support for breastfeeding and support for continuing SUD treatment. For women in recovery from an opioid use disorder continuing treatment means uninterrupted, medication-assisted treatment (MAT), which is an essential tool for stability [17]. Education and support regarding safe sleep for the infant and strategizing how to balance need for sleep, night time feeding, and other factors are needed by all new mothers and are particularly important for substance-exposed infants [18]. Women should know they are not alone in their postpartum recovery. Providers and professionals should be just as committed to women's healthy postpartum recoveries as they are to women's healthy pregnancies and healthy deliveries. Women in recovery are particularly vulnerable to overdose in the first year postpartum. An increasing maternal mortality rate in the postpartum period in North Carolina points to the urgent need for health care providers to realize the importance of fourth-trimester care [19].

Accessing Treatment for Substance Use Disorders

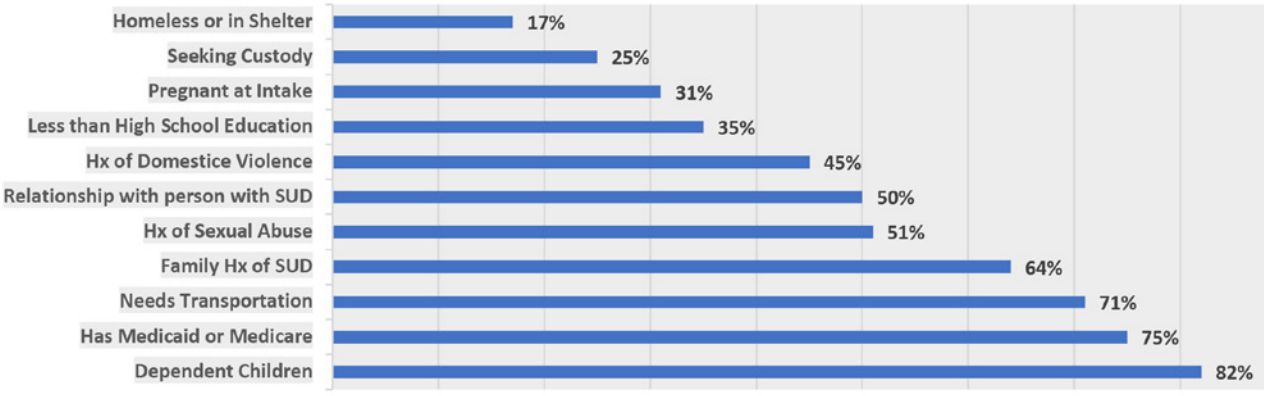
An important part of care for women with an opioid use disorder includes the use of opioid agonist medication, such as buprenorphine or methadone, as part of comprehensive SUD treatment. All national and international guidance documents recommend the use of methadone or buprenorphine over medically assisted withdrawal, commonly known as detoxification. Either medication, taken in appropriate doses, can prevent relapse to opioid use, improve maternal medical outcomes, reduce the chance of fetal death, and improve fetal growth as compared to no treatment [20].

Although federal regulations require priority access to opioid treatment programs for pregnant women, only a third of pregnant women who qualify actually receive opioid treatment medication in the United States [21]. Thus, more effort is needed to help improve accessibility and/or expand treatment for pregnant and parenting women.

Today, the North Carolina Perinatal and Maternal Substance Use and CASAWORKS for Families initiatives are comprised of 25 programs using evidence-based treatment models located in 13 counties across the state. The Perinatal Substance Use Specialist at the Alcohol Drug Council of North Carolina manages the statewide capacity management system, providing information and referral for SUD treatment to pregnant and parenting women in need of services and their families [22]. This is done through a toll-free number and a weekly list of available beds at residential treatment sites emailed to treatment, health, medical, and social services staff and providers across the state. The Perinatal Substance Use Specialist also has the ability to provide a warm handoff to the Local Management Entity-Managed Care Organizations for community-based SUD services and supports. Residential programs in the Perinatal and Maternal Substance Use and CASAWORKS initiatives accept infants and/or young children with their mothers regardless of their county of residence in North Carolina. All residential programs accept women who have MAT as part of their recovery.

Each program in the initiatives is unique, but shares the same values and approach to treatment. All of the program leaders understand and strive to provide robust gender-responsive and family-centered services that include, but are not limited to, evidence-based behavioral health treatment services for pregnant and parenting women that are both

FIGURE 2.
Client Presentation at Intake to Treatment, 2018



Source. S. Green, 2018 Cross Site Evaluation.

gender specific and trauma informed; parenting support; therapy that addresses primary relationships; arrangements for treatment and prevention services for children; referral for and coordination with medical care for women; and pediatric and developmental care for children. Job readiness and job coaching are key provisions in the 7 CASAWORKS for Families sites, which have a primary goal of self-sufficiency.

Evidence-based treatment models used by the programs in the initiatives include but are not limited to the following for adult clients: Seeking Safety; Beyond Anger and Violence; Beyond Trauma: A Healing Journey for Women; Helping Women Recover; The Matrix Model; Cognitive Behavioral Therapy, including Dialectical Behavioral Therapy; Contingency Management; and Motivational Interviewing.

The parenting and prevention models used with mothers with children include: Nurturing Program for Families in Substance Abuse Treatment and Recovery; Strengthening Families Program; Circle of Security®; Celebrating Families!™; and Triple P – Positive Parenting Program.

The annual cross-site evaluations of the North Carolina programs have shown over the years that, overall, while primarily providing treatment to mothers, the programs also were meeting child health needs through high engagement in prenatal care among pregnant women; healthier newborn birth weights for pregnant women who enter treatment prior to delivery; lower recidivism with child welfare among families engaging with treatment services; fewer number of days in out-of-home foster care placement for children of parents involved with child welfare as compared to parents with substance use problems not engaged in the services; successful engagement with pediatric care for families involved with services; increased affectional bonds and reduced conflict among families engaged in parenting programs; and successful engagement in the work force (internal data, Green SL, North Carolina Perinatal Maternal Substance Use and CASAWORKS Initiative Annual Cross Site Evaluation Reports, 2018).

All mothers and children deserve the best chance at a healthy life. A nurturing, supportive treatment approach for the mother and child can help support that objective. Women who have SUD require an individualized, multifactorial treatment approach. Medical and behavioral care are important components of a whole-health chronic disease treatment approach and work best with comprehensive physical, psychological, and case management services. A dyadic approach to care is essential to improving outcomes for the mothers, their children, and their families. NCMJ

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Acknowledgments

Potential conflicts of interest. All authors have no relevant conflicts of interest.

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