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# A Multidisciplinary Approach for Opioid Dependent Mothers and Their Infants (2 CME)

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EXECUTIVE SUMMARIES BY



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## OVERVIEW

The number of opiate dependent pregnant women has increased more than four-fold between 2000-2009, with an estimated 3.39 per 1000 infants born exposed to opiates in 2009 (or more than one infant born per hour in the US in 2009). Concurrent treatment of opiate addiction in the setting of prenatal care is critical for both the health of the mother and the fetus. Once the infant is born, coordination of obstetric, pediatric and addiction care can be challenging.

## CONTEXT

The objective of this workshop is to provide best practices in addiction treatment for opioid dependent women, both prenatally and after delivery using the evidence-base and consensus. To achieve the objective, topics addressed will include opioid agonists for peri-partum women, support of the mother-infant dyad through the neonatal period, coordination of obstetric and pediatric care for mother-infant dyads, and leveraging the skills of the multidisciplinary team to optimize patient outcomes. The presenters will draw upon their rich clinical experiences including; running an obstetric clinic that caters to pregnant women with substance abuse, caring for women with substance abuse post-partum in primary care and support of the mother-infant dyad from a pediatric perspective.

# 1 TREATMENT OPTIONS FOR PREGNANT WOMEN WITH OPIOID USE DISORDERS

## *BRIEF BACKGROUND ON NAS & OTHER OPIOID USE DISORDERS*

National data from 2000-2009, show that roughly 16.2 % of teens and 7.4 % of pregnant women, ages 18-24, used illicit substances. During that time period, the incidences of antepartum opioid use jumped from 1.19 per every 1,000 hospital births to 5.63 per every 1,000 hospital births.

As a result, the number of neonatal abstinence syndrome (NAS) – the withdrawal syndrome that infants experience – increased as well. Data shows the incidence of NAS increased from 1.20 per every 1,000 hospital births to 3.39 per every 1,000 hospital births.

“This is becoming a really charged issue,” said **Sarah Bagley, MD**, Addiction Medicine Fellow at Boston University. “I have seen increasing numbers of news accounts where they talk about addicted babies, which is actually not possible. As physicians we know addiction has to do with compulsions and cravings and babies don’t have that. They can have tolerance and they can withdraw from the substances, but they can’t be addicted.”

## *WHO GUIDELINES FOR IDENTIFICATION & MANAGEMENT OF SUBSTANCE USE AND SUBSTANCE USE DISORDERS IN PREGNANCY.*

The **World Health Organization** (WHO) released guidelines which contain recommendations on the identification and management of substance use and substance use disorders for health care services that assist women who are pregnant, or have recently had a child, and who use alcohol or drugs or who

have a substance use disorder. The guidelines were developed in response to requests from organizations, institutions and individuals for technical guidance on the identification and management of alcohol and other substance use and substance use disorders in pregnant women, with the target of healthy outcomes for both pregnant and their fetus or infant.

The Overall Principles include:

- Prioritized prevention
- Ensure access to prevention and treatment
- Respect autonomy
- Provide comprehensive care
- Safeguard against discrimination and stigmatization

“There have been stories in the last couple of years about women who have substance use disorders, opioid use disorders who are being coerced into treatment or are being prosecuted ... and that is really troubling,” Bagley said. “That’s because we know there is effective treatment. And by punishing these women does not set them up for success and certainly not setting up their infants for success.”

According to WHO, use of alcohol, illicit drugs and other psychoactive substances during pregnancy can lead to multiple health and social problems for both mother and child. Use of alcohol during pregnancy can lead to fetal alcohol syndrome and other harms such as spontaneous abortion, stillbirth, low birthweight, prematurity and birth defects.

Dependence on alcohol and other drugs can also severely impair an individual’s functioning as a parent, spouse or partner, and instigate and trigger gender-based and domestic violence, thus significantly affecting the physical, mental and emotional development of children.

Here are the Selected Recommendations from WHO specifically for women with substance use and substance use disorders during pregnancy:

- Pregnant women on opioids should be encouraged to use opioid maintenance treatment where available, rather than attempting opioid detoxification.
- Pregnant patients with opioid dependence should be advised to continue or commence opioid maintenance therapy with either methadone or buprenorphine.
- Mothers with substance use disorders should be encouraged to breastfeed unless the risks clearly outweigh the benefits.
- Breastfeeding women using alcohol or drugs should be advised and supported to cease alcohol or drug use; however, substance use is not necessarily a contraindication to breastfeeding.
- Mothers who are stable on opioid maintenance treatment with either methadone or buprenorphine should be encouraged to breastfeed unless the risks clearly outweigh the benefits.

#### ***ACOG / ASAM RECOMMENDATIONS FOR IDENTIFICATION & MANAGEMENT OF SUBSTANCE USE AND SUBSTANCE USE DISORDERS IN PREGNANCY.***

- Referral to methadone treatment gold standard but consider buprenorphine treatment.
- Tapering methadone or buprenorphine may lead to relapse.
- Abrupt discontinuation may lead to preterm labor, fetal distress

or fetal demise.

- Patients who are stable should be compatible with breastfeeding.
- Neonatal abstinence syndrome is expected and treatable.

### ***BUPRENORPHINE VS. METHADONE TREATMENT***

**Buprenorphine** is an opioid partial agonist. This means that, although buprenorphine is an opioid, and thus can produce typical opioid agonist effects and side effects such as euphoria and respiratory depression, its maximal effects are less than those of full agonists like heroin and methadone. At low doses buprenorphine produces sufficient agonist effect to enable opioid-addicted individuals to discontinue the misuse of opioids without experiencing withdrawal symptoms.

**Methadone** is currently the recommended treatment for opioid-addicted pregnant women, and when properly used is considered relatively safe for the fetus. However, it is associated with neonatal abstinence syndrome (NAS) — a cluster of symptoms stemming from opioid withdrawal in the newborn — often requiring medical treatment and extended hospital stays.

Research suggest that babies born to women addicted to opioids fare better when their mothers are treated with addiction medication, like buprenorphine or methadone, rather than babies whose mothers are not treated at all.

According to Bagley, there are a number of pregnant women fighting substance use disorders who prefer methadone, but have to deal with a restrictive schedule and face the stigma associated with taking the medication. “With buprenorphine, there’s less stigma because you can take the medication at home and there’s possibly better NAS outcomes.”

### ***BREASTFEEDING IS BEST***

Bagley emphasized the recommendation of breastfeeding, citing all the benefits it has to the newborn.

“Breastfeeding leads to increased attachment,” she said. “But it has also been shown to decrease NAS outcomes.”

## **2 DESCRIPTION OF MULTIDISCIPLINARY CARE MODEL**

### ***PROJECT R.E.S.P.E.C.T***

Boston Medical Center has a program call **Project R.E.S.P.E.C.T**, which is for the treatment of addiction in pregnancy. R.E.S.P.E.C.T. stands for: Recovery, Empowerment, Social Services, Prenatal Care, Education, and Treatment. This high-risk obstetrics clinic specializes in the treatment of addiction disorders during pregnancy, particularly opiate abuse with methadone and buprenorphine. There is a multidisciplinary approach to these patients to optimize their obstetric outcomes and empower them to be effective mothers.

“We really wanted the name to embody how we felt about our patients, how we wanted them to be seen, how we wanted them to be treated, how we wanted them to feel ... as

well as our expectations from them when they came to see us,” said **Michelle Sia, MD**, director of the Obstetrics & Gynecology Residency Training Program at Boston University Medical Center and associate director of the Project R.E.S.P.E.C.T.

About 150 patients participate in the program annually. Sia said 50% of the women are on buprenorphine and the other 50% take methadone.

“We work toward getting them engaged in care, getting them in a safe space and really promoting maintenance,” Sia said. “The key approach with our patients to this multidisciplinary model is the whole ideal of harm reduction.”

## 3 CHALLENGES IN THE POSTPARTUM PERIOD

### *RESPECT PLUS*

**RESPECT Plus** is the follow up program to Project R.E.S.P.E.C.T. It assists the new mothers through their child’s first year. Basically, providing support to infants born to mothers with opioid dependency and their families.

Data collected at Boston Medical Center from January 2010 to October 2011 show that 34 infants were diagnosed with symptoms neonatal abstinence syndrome. Of those infants, 16 or 47% were removed from the home during the first year of their life; 13 or 38% had a reports of maltreatment and/or neglect; and 7 or 21% had two subsequent reports of maltreatment and/or neglect.

RESPECT Plus was born out of desire to improve outcomes for infants and for families – especially for those parents who are in early substance abuse recovery.

Project Overview include:

- Strengthening families’ framework
- Attachment & toxic stress
- Medical legal partnership

“The whole idea is to look at whether a parent or a primary caregiver was available and responsive to the infant’s needs,” said **Carrie Schultz, MSW**, a RESPECT Plus family specialist at Boston Medical Center.

### *ADDRESSING TOXIC STRESS*

What is it? Toxic stress is learning how to cope with adversity is an important part of healthy child development. When we are threatened, our bodies prepare us to respond by increasing our heart rate, blood pressure, and stress hormones, such as cortisol. When a young child’s stress response systems are activated within an environment of supportive relationships with adults, these physiological effects are buffered and brought back down to baseline. The result is the development of healthy stress response systems.

Schultz said the biggest challenge for addicted mothers in recovery, and their young child, go beyond being a new parent.

“These mothers feel incredible stigma and judgment,” Schultz said. “Beliefs about social welfare, and addiction and parenting are challenging. It’s like talking about politics and religion. Everybody has a really strong opinion and are very passionate.”

Pregnancy in opioid-dependent women is a major public health issue. Women who are afflicted by opioid addiction are a highly vulnerable group of patients frequently becoming pregnant unplanned and at risk of adverse pregnancy outcomes and perinatal complications. Opioid agonist maintenance treatment is the best option for the majority of women. Ideally, early and closely monitored treatment in an interdisciplinary team approach including social workers, nurses, psychologists, psychiatrists, gynecologists, anesthesiologists, and pediatricians should be provided.

Additionally, early identification of opioid-dependent pregnant women improves maternal and infant outcomes. Contraceptive counseling should be a routine part of substance use treatment among women of reproductive age to minimize the risk of unplanned pregnancy.

**Presenter Bios:**

**Sarah Bagley, MD**, Addiction Medicine Fellow, Boston University; Dr. Bagley was trained in a combined internal medicine-pediatrics program at Brown University prior to coming to Boston Medical Center as an Addiction Medicine fellow. Because of her background in both medicine and pediatrics, she has a research and clinical interest in the care of both mothers with addiction and the effects of addiction on child development.

**Michelle Sia, DO**, Clinical Assistant Professor of Obstetrics & Gynecology, Boston Medical Center/Boston University School of Medicine; Dr. Sia is the Director of the Obstetrics & Gynecology Residency Training Program at Boston University Medical Center (BMC). She is an attending physician in Obstetrics & Gynecology at BMC and a Clinical Assistant Professor of Obstetrics & Gynecology at the Boston University School of Medicine. She received her Osteopathic Medical Degree from the Kirksville College of Osteopathic Medicine and completed her residency training in Obstetrics and Gynecology at BMC. In addition to caring for women with general obstetric & gynecologic issues, she is the Associate Director of the Project R.E.S.P.E.C.T Program. This high risk obstetrics clinic specializes in the treatment of addiction disorders during pregnancy, particularly opiate abuse with methadone and buprenorphine. There is a multidisciplinary approach to these patients to optimize their obstetric outcomes and empower them to be effective mothers.

**Carrie Schultz, MSW**, RESPECT PLUS Family Specialist, Boston Medical Center; MS. Schultz obtained her MSW at Simmons School of Social Work. She is currently involved in an intervention research project to support infants born to mothers with opioid dependency.