



CLINICAL CARE AND MANAGEMENT OF OPIOID USE DISORDER IN PREGNANCY

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“Be the change that you want to see in the world.”

—Mahatma Gandhi

INTRODUCTION

There is a disturbing villain which no longer lurks in the dark shadows of a city alley or lies hidden away from our friendly neighborhoods. It lives among us in our communities, in our school systems, on our front porches, and in our hospital systems. It is the vile face of prescription drug abuse.

The opioid epidemic has been a perpetual challenge across the globe. It has infiltrated every avenue of society and leaves no one unscathed by its devastating impact on mothers and their young, even those who have not yet entered the world. Opioid dependency disorders affect every corner of society, without discrimination by race, culture, age, or gender.

We’re all aware of the problem, but its staggering magnitude in the United States isn’t apparent unless we look at some numbers. Although the United States has 4.6% of the world’s population, it accounts for 80% of opioid drug consumption worldwide.¹ In 2015, as overdose deaths from opioid pain relievers skyrocketed, an estimated 2 million U.S. women reported opioid drug overuse, of whom approximately 600,000 women admitted to heroin abuse. Opioid abuse killed an average of 31 women a day; between the years 1999-2010, women experienced a 400% increase in deaths, as opposed to an increase of 237% for their male counterparts.² Contributing factors which complicate dependency for women are theorized to be their smaller body size and metabolic differences, which accelerate physical dependence.³

SCOPE OF THE EPIDEMIC IN PREGNANCY

It is known that opioid drugs cross the blood-brain barrier, binding to specific G-protein receptors in the brain, and potentially causing altered pain perception, decreased respirations, and other physiological effects in the pregnant mother.⁴ As these drugs also cross the placenta, the neonate in utero is also exposed to

opioids, leading to a variety of complex developmental disorders and complications as the infant enters the world and suddenly goes through opioid withdrawal.

The American College of Obstetricians and Gynecologists (ACOG) estimates that 30%–80% of neonates born after intrauterine exposure to opioids will suffer from Neonatal Abstinence Syndrome (NAS) as early as 72 hours after birth. Symptoms can include tremors, seizures, excessive crying, fever, diarrhea, respiratory difficulties, poor weight gain, and excessive sweating. Hospital length-of-stay increases, and readmissions are twice as common with NAS. The enormous cost of providing appropriate care has been estimated at more than \$1.5 billion.⁵

Complications associated with NAS include low birthweight, jaundice, prolonged hospital stay and potential admission to the newborn intensive care unit, according to the American Academy of Pediatrics.⁶

Although NAS remains the general term used in clinical practice and in the literature, a more specific term has gained popularity in an effort to differentiate infants who experience opioid withdrawal from those exposed in utero to other toxic substances such as tobacco, alcohol, and other prescription medications used throughout the pregnancy. The concept of *Neonatal Opioid Withdrawal Syndrome (NOWS)* is being introduced in the clinical arena to promote best practices for opioid dependent infants, who require distinctive tools for assessment and treatment.⁷

CARE MANAGEMENT CONSIDERATIONS

Despite widespread education and awareness surrounding the care and management of opioid use during pregnancy, stigma remains the most significant barrier for effective treatment. Dr. Loretta Finnegan, former medical advisor to the director of the Office of Research on Women’s Health at the U.S. National Institutes of Health suggests, “Rather than discouraging discussions of drug use during pregnancy, we should be looking upon this as an opportunity to bring about positive, long-lasting change in the life of

the mother and the child, through effective treatment and support services.” Often these women appear on the doorsteps of clinics and emergency departments seeking help, but instead are judged unfairly due to their addictions.⁸

Health care providers need to remain mindful of the consequences for both mother and baby if women are too fearful or embarrassed to seek treatment during pregnancy. The Association of Women’s Health, Obstetrics, and Neonatal Nurses (AWHONN, 2015) stresses the importance of compassionate care and transparent advocacy for females identified as opioid abusers before conception. Hospitals and birthing centers across the country are making tremendous efforts to promote safe health practices with the implementation of patient safety bundles. The identification and recognition of women at risk remains at the forefront of best practice in care and management in the antepartum and intrapartum period.

HOW IS THIS BEING ADDRESSED BY OUR HOSPITAL COMMUNITY?

As is often the case, one person’s experience impelled her to act. Connie Heidig, a seasoned labor and delivery RN at Penn Medicine Lancaster General Health Women & Babies Hospital, recognized the need for a more detailed and comprehensive approach to patients entering the triage and the labor and delivery units with either an active opioid disorder or a history of opioid dependency. Her concern stemmed from having seen one of her own family members suffering from opioid dependency during labor:

“My family member told the providers that she was clean, when, in fact, she was not. Urine toxicology screens were not done as they were satisfied with her testimony. Prior to her delivery via cesarian section, she was using illegal pain medication, but nobody knew about it. After she delivered, she was given IV pain medication and her drug use spiraled out of control. I do not blame the OB practice, but felt that if they had more knowledge or had a screening tool, this could have been avoided.”

Connie had been concerned about “knowledge deficits” regarding the opioid epidemic for this population in the community. Her passion for the safety and appropriate treatment of these patients ignited a spark which would serve as the impetus for desperately needed change. She contacted Dr. Robert Faizon, chief

safety director at Women & Babies Hospital, who was excited about the idea. He developed a task force to work on the project in February 2018.

Over time, the task force grew to include anesthesiologists, social workers, case managers, psychiatrists, addiction counselors, perinatal safety representatives, project managers, drug and alcohol counselors, nurse leaders, and of course, Connie, the nursing representative for the team. The purpose of the task force was to properly identify and treat pregnant women with opioid use disorder (OUD). She would share stories or events that occurred on the units in order to support the need for an action plan and to help her colleagues on the task force become more aware of the problem. Connie took the initiative to identify the need for a screening tool that would serve as a flag to help providers recognize a patient suspected of opioid use.

With Connie’s passionate persistence, the team, led by Dr. Faizon, developed a screening tool, protocol, and order panel that is currently being implemented by the labor and delivery nursing and medical staff (Fig. 1). The tool provides a platform of guidance to the provider in the care and management of opioid dependent patients, and those who are also at risk for relapsing into opioid dependence following delivery. The nursing protocol will drive best practices and help answer questions such as:

Is this patient using opioids now or do they have the potential to use? Is there a family history risk factor that could put this patient at risk for using? When the patient is discharged from our care, should they be placed on methadone or suboxone? Is the patient being managed appropriately during the labor process?

Janay DiBerardino, perinatal safety nurse at Women & Babies Hospital, collaborated with Connie and the team to successfully develop an opioid dependency screening algorithm (Fig. 2). According to Connie, “The opioid dependency task force included valuable input and work from so many different professionals.” The order set and screening tool was presented by Dr. Faizon at the OB Care Management Team March of this year and was accepted unanimously by the medical staff.

The order panel provides standardization of care for antepartum and intrapartum patients with opioid use disorder, includes proper medically assisted treatment (MAT) options for patients

already on MAT, and has the capacity to connect patients with appropriate external treatment centers. The order panel allows for pain management options that include higher doses during labor, and includes recommendations for lab tests and consults. The policy and algorithm for opioid use disorder is used to screen all pregnant patients using a single screening question (SSQ). Patients presenting with high-risk clinical conditions and those on MAT with a positive SSQ will receive an automatic urine toxicology screen. Additionally, drug and alcohol consults will be available on a 24/7 basis.

The team at Women & Babies Hospital came together as a united army of professionals dedicated to providing quality of care without discrimination or judgement for their patients. They are able to persevere with these difficult situations because they know what pregnant patients with OUD need, and they recognize the challenge posed by the current statistics on the devastating consequences associated with opioid use in pregnancy.

Heeding Gandhi's admonition (see beginning of article), Connie indeed became the change she wanted to see in the world of maternal child nursing at the Women & Babies Hospital.

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Patient Name: _____
 MRN: _____
 Date of Birth: _____
 Complete above information or attach patient label to each page.

Opioid Use Disorder (OUD) treatment for Antepartum/Intrapartum Patients - WBH

Allergies/Height/Weight

Height/Weight:

- Height: _____ (inches)
- Weight: _____ (kg)
- Allergies (list here): _____
☐ No known drug allergies

Nursing

- ☐ Perform COWS assessment on admission and every 12 hours if opioid use was in the last 48 hours and report score to provider if greater than 8

Medications

On Maintenance Therapy (Use prior to admission dose and time schedule):

- Avoid using Nubain and Stadol
- Check prior to admission dose with https://starnet2/sites/DepartmentsM_P/Pharmacy/Policy%20%20Procedures/Methadone%20Maintenance%20Facilities.pdf#search=methadone
- ☐ Buprenorphine HCl (Subutex) SL tablet [☐2 mg ☐4 mg ☐8 mg ☐12 mg ☐16 mg] sublingual _____ [frequency]
- ☐ Methadone HCl(Dolophine) [☐5 mg ☐10 mg ☐20 mg] orally _____ [Frequency]

Additional Pain Management:

- ☐ morphine sulfate 5 mg intravenously every 2 hours as needed for moderate pain
 Or
☒ morphine sulfate 10 mg intravenously every 2 hours as needed for severe pain
 Or
☐ HYDROMORPHONE HCl (DILAUDID) 1 mg intravenously every 2 hours as needed for moderate pain
 Or
☒ HYDROMORPHONE HCl (DILAUDID) 2 mg intravenously every 2 hours as needed for severe pain
 Or
☐ FentaNYL Citrate (SUBLIMAZE) 50 mcg intravenously every 2 hours as needed for moderate pain
 Or
☒ FentaNYL Citrate (SUBLIMAZE) 100 mcg intravenously every 2 hours as needed for severe pain

Laboratory

- ☐ Urine toxic screen with confirmation
- ☐ Rapid HIV (LAB3000160) WBH ONLY
- ☐ Hepatitis C Antibody (LAB3060326)

Consultations

- ☐ Consult Healthy Beginnings for Opioid use in pregnancy
- ☐ Case Management Alert re: opioid use
 * Comments:
 *If case management is needed on evenings and weekends and the patient requires immediate attention, please contact the on call case manager via the hospital operator.
- ☐ Consult Family & Community Medicine (FHS)
 Reason for consult: OUD treatment management
 Patient to be seen: [☐STAT ☐Today ☐In AM ☐Other (please comment) _____]

THE FOLLOWING SUBSTITUTION WILL OCCUR UNLESS THE PHYSICIAN INDICATES "BRAND NECESSARY" ON ORDER (1) GENERIC SUBSTITUTION ACCORDING TO FORMULARY (2) SUBSTITUTION OF AN EQUIVALENT THERAPEUTIC AGENT AS DEFINED BY THE PHARMACY AND THERAPEUTICS COMMITTEE

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Fig. 1. Protocol for Opioid Use Disorder in Pregnancy.

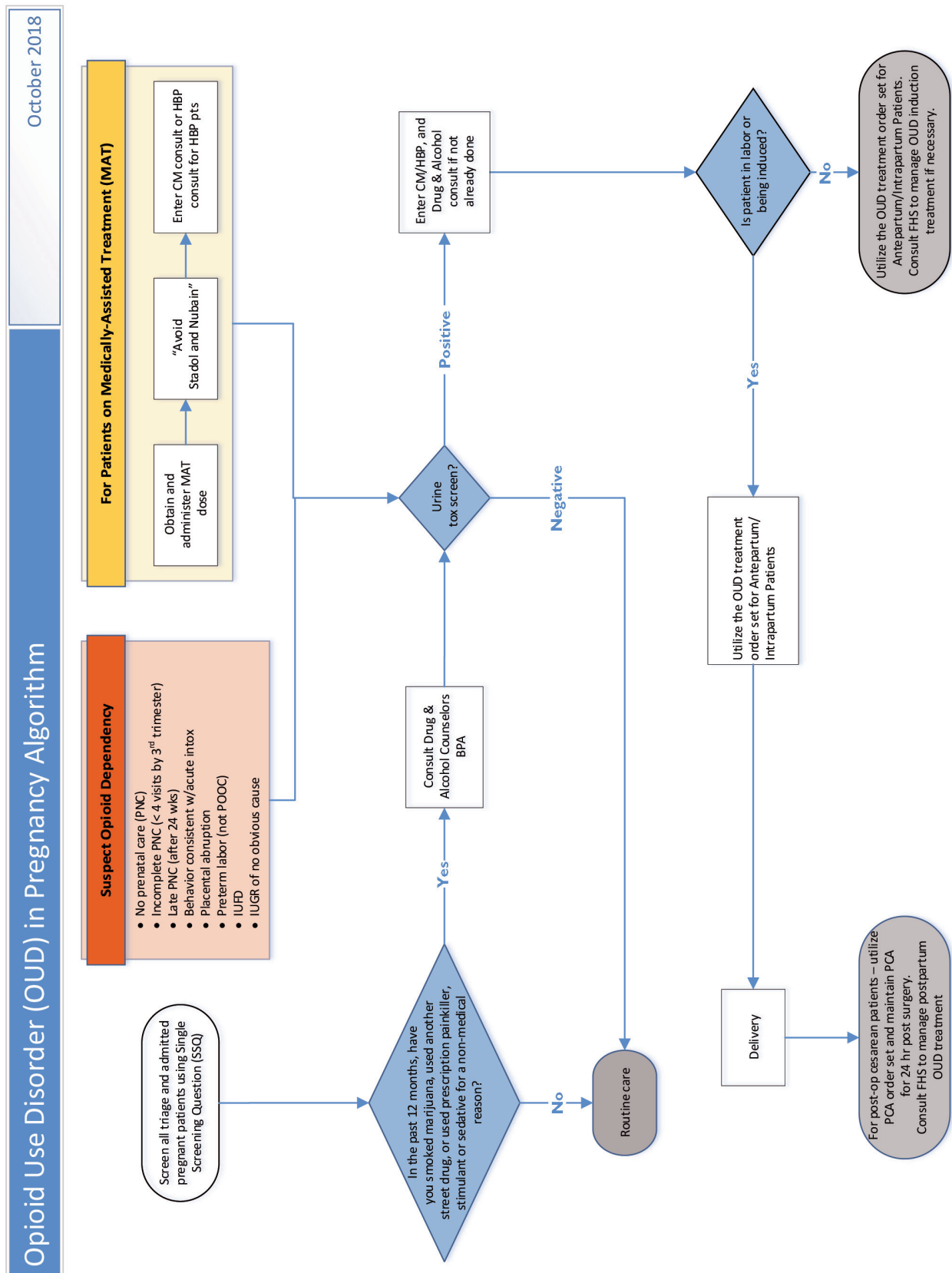


Fig. 2. Algorithm for Opioid Use Disorder in Pregnancy.