

Mother & Baby Substance Exposure Toolkit

Best Practice No. 38

A part of the California Medication Assisted Treatment Expansion Project

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Educate pregnant women and families about neonatal abstinence syndrome and the newborn hospital experience

Best Practice No. 38

Outpatient, Labor and Delivery, Nursery/NICU, and Education

Overview

Provide education to pregnant women and families regarding neonatal abstinence syndrome (NAS), including both short-term effects and long-term consequences. Prepare pregnant women and families for an optimal hospital experience for their substance-exposed newborn by educating them on what to expect during their stay.

Why we are recommending this best practice

Educating pregnant women and families about what signs and symptoms of NAS to anticipate, and how to identify these symptoms in their newborn, can help them be active participants in the newborn's care immediately after birth.

- Short-term effects can appear within 1-5 days and most commonly within 2-3 days. Symptoms can include but are not limited to high-pitched cries, tremors, difficulty sleeping, poor feeding, and diarrhea. Depending on the severity, the newborn's hospital stay may be prolonged.
- Long-term effects can appear within months to years. These consequences may include problems with vision, motor skills, and behavior/cognition, sleeping disturbances, and ear infections. Early intervention programs can ameliorate these effects and provide surveillance for them.

Optimizing the newborn hospital experience can decrease the length of stay (LOS) and the need for pharmacotherapy. Evidence-informed practices include rooming-in, skin-to-skin contact, breastfeeding, decreasing environmental stimulation, and functional scoring of the newborn (engaging mothers to participate in scoring objective elements such as quality of cry, stool consistency, and tremulousness can be both empowering and helpful). Pregnant women and families who are informed in advance can be prepared to participate in these practices.

Strategies for Implementation

Conduct a prenatal visit to discuss newborn care and the newborn hospital experience. This can be accomplished in a variety of ways, including a pediatric provider appointment, hospital nursery/NICU visit, social worker appointment, group visit, community support group, or public health nurse outreach. Areas of discussion should include the following:

- Rooming-in when available. Encourage close and frequent maternal contact if unable to room-in.
- Initiating early skin-to-skin contact with the newborn which promotes bonding, soothes the newborn, and aids in breastfeeding.
- Promoting breastfeeding if the mother is on a stable medication assisted treatment (MAT) regimen and has no contraindications. Breastfeeding is encouraged for mothers taking methadone or buprenorphine regardless of dose, as transfer into milk is minimal. Breastfeeding is associated with decreased severity of symptoms, less need for pharmacotherapy, and shorter length of stay. Refer to [Best Practice #9](#) for more information regarding breastfeeding.
- Decreasing stimulation by having limited visitors, reducing noise, and using low lighting.
- Using functional scoring to evaluate withdrawal (e.g., ability to eat, sleep, and be consoled). Refer to [Best Practice #19](#) for more information regarding functional scoring.
- Preparing the family for potential escalation of care based on the clinical pathway used by the hospital. Discuss the environment (e.g., NICU or Level 2 nursery), level of family involvement, role of pharmacotherapy, weaning protocol, and discharge criteria.
- Explaining the potential for the newborn to be discharged without treatment if feeding and sleeping well with minimal or no signs of withdrawal after three days for opioids with a short half-life and 5-7 days for opioids with a long half-life. This period allows for adequate identification and monitoring of possible withdrawal symptoms, the onset of which may vary depending on the medication dose, the infant's metabolism, and the presence of polysubstance abuse. Refer to Table 1 in Reference #8 for detailed information regarding specific withdrawal patterns by substance. Refer to [Best Practice #30](#) for information on inpatient monitoring of newborns managed with a non-pharmacologic bundle of care.
- Preparing the family for potential involvement of Child Protective Services (CPS). In California, there are no laws mandating that prenatal substance exposure be reported to CPS, unless the required assessment identifies other factors that indicate significant risk to a child. If CPS involvement is warranted, they will determine a safe home environment for the newborn. A safe and permanent home and family is the best

place for children to grow up. CPS focuses on building family strengths and provides parents with the assistance needed to keep their children safe so that the family may stay together. CPS efforts are most likely to succeed when patients are involved and actively participate in the process. When concerns about risk factors don't rise to the level of an investigation by CPS, a Plan of Safe Care is developed upon hospital discharge (or perhaps earlier in the pregnancy when opioid use disorder is identified) to support treatment and recovery for the mother and enhance protective factors for the dyad. Alternatively, if CPS makes an initial determination of child neglect or abuse, they may create an agreement between a parent or caretaker that is called a safety plan and which may restrict a parent from having any contact or unsupervised contact with a child. CPS must make reasonable efforts to develop safety plans to keep children with their families whenever possible, although CPS may refer for juvenile or family court intervention and placement when children cannot be kept safely within their own homes. When children are placed in out-of-home care because their safety cannot be assured, CPS will work to develop a permanency plan as soon as possible.

- Providing pregnant women and families with educational handouts, such as the NAS Parent Brochures developed by the Illinois Perinatal Quality Collaborative (ILPQC) (see Resources below) and others available on the MBSEI website.
- Enrolling the newborn in early intervention programs and developmental follow-up clinics prior to discharge.

Deep Dive

Pediatric prenatal visits are a critical opportunity for health care professionals to provide pregnant women and their families with information about caring for their newborn. However, this opportunity is highly underutilized. The American Academy of Pediatrics (AAP) reports only 5-39% of all first-time parents and 5% of urban poor pregnant women attend a pediatric prenatal visit (Yogman, et al.). These prenatal visits are especially important when opioid exposure is involved as they allow providers to educate families about NAS and to prepare them for what to expect from their newborn's hospital experience.

All pregnant women with OUD should be strongly encouraged by the OB/GYN team to attend a pediatric prenatal visit. Local offerings may dictate the choice of who conducts this visit, and it may be offered individually or in a group setting. A nursery or NICU provider can speak directly to inpatient policies, parent involvement, and hospital treatment options. A pediatrician identified in advance can provide continuity and ongoing support after discharge. Social workers and public health nurses can provide education on available resources. It is best to hold the prenatal visit at the start of the third trimester. Providing educational handouts will allow families to review the information that was shared during the visit after they go home.

Reference: Yogman, et al. The Prenatal Visit. Pediatrics 2018;142(1).

Resources

1. NAS What You Need To Know.
2. Addiction Free CA.

References

1. Macmillan KDL, Rendon CP, Verma K, Riblet N, Washer DB, Holmes AV. Association of rooming-in with outcomes for neonatal abstinence syndrome. *JAMA Pediatr.* 2018;172(4):345. doi:10.1001/jamapediatrics.2017.5195.
2. Crook K, Brandon D. Prenatal breastfeeding education. *Adv Neonat Care.* 2017;17(4):299-305. doi:10.1097/anc.0000000000000392.
3. ACOG Committee Opinion No 711: Opioid Use and Opioid Use Disorder in Pregnancy. *Obstet Gynecol.* 2017;130: e81-94.
4. Hudak ML, Tan RC. Neonatal drug withdrawal. *Pediatrics.* 2012;129(2):e540- 560.
5. Kocherlakota P. Neonatal abstinence syndrome. *Pediatrics.* 2014;134(2):e547-561.
6. US Department of Health and Human Services. Child Protective Services: A Guide for Caseworkers. <https://www.childwelfare.gov/pubpdfs/cps.pdf>. Accessed December 19, 2019.
7. Putnam-Hornstein E, Prindle JJ, Leventhal JM. Prenatal substance exposure and reporting of child maltreatment by race and ethnicity. *Pediatrics.* 2016;138(3). doi:10.1542/peds.2016-1273.
8. Maguire DJ, Taylor S, Armstrong K, et al. Long-term outcomes of infants with neonatal abstinence syndrome. *Neonatal Netw.* 2016;35(5):277-286.
9. Yogman, et al. The prenatal visit. *Pediatrics.* 2018; 142 (1).

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