

Neonatal Abstinence Syndrome and Ethical Approaches to the Identification of Pregnant Women Who Use Drugs

Mishka Terplan, MD, MPH, and Howard Minkoff, MD

The United States is experiencing an epidemic of opioid use, addiction, and neonatal abstinence syndrome. Consequentially, a great deal of public, and public health, attention has turned toward the timely recognition of pregnant women who use drugs. We explore the clinical efficacy and ethical acceptability of different methods of identification—contrasting drug testing (using biologic samples such as urine) with screening (using an instrument or questionnaire) under both universal and selective approaches within the current legal and social landscape, which is fraught with potential adverse consequences for both the woman and her child. Unlike other medical conditions such as diabetes, the sequelae of drug use in pregnancy can go beyond the clinical, because its assessment may result in child removal as well as maternal arrest, prosecution, and punishment. Although universal voluntary screening using a validated instrument is the most reasonable public health strategy, physicians should advocate for that only as strongly as they advocate for social support and addiction care services for those subsequently identified.

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The opioid epidemic in the United States has left an epidemic of neonatal abstinence syndrome in its wake. Neonatal abstinence syndrome is the result of the sudden cessation of chronic fetal substance exposure.

From the Behavioral Health System, Baltimore, Maryland; and the Department of Obstetrics and Gynecology, Maimonides Medical Center, Brooklyn, New York.

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Corresponding author: Mishka Terplan, MD, MPH, 1 N Charles Street, Suite 1300, Baltimore, MD 21201; email: mterplan@gmail.com.

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Although it is an expected and treatable consequence of opioid exposure, the symptoms of withdrawal can be severe and result in prolonged hospital stays.

A pediatrician who is armed with knowledge of a mother's drug use during pregnancy might be better prepared to diagnose and intervene in a timely fashion to temper the effects of neonatal abstinence syndrome. A recent review focused on opioid use in pregnancy suggested that, "health care providers should routinely screen all pregnant women for drug and alcohol use through a comprehensive history and physical examination and with validated screening tools... After informed consent and assurances of patient confidentiality, urine drug testing can then be used to detect or confirm suspected substance use."¹ Although this approach, on the surface, seems reasonable, it masks, or at least understates, the deeper ethical and social challenges that any approach to identifying pregnant women who use drugs may raise, because the process by which a physician uncovers a mother's substance use is fraught with potential adverse consequences. In this article, we explore the ways in which the interests of the drug user, her child, and her family can best be served, highlighting the need to avoid compromising the family's well-being through policies that ignore the legal and social ramifications of identifying a woman as a drug user.

In a perfect world, detecting prenatal drug use would be simple. Every pregnant woman would get tested with an accurate tool, and both the mother and the newborn would receive appropriate treatment. Drug use would be recognized as a medical issue, and legal entanglements would not flow from positive toxicology results. Societal resources would be committed to strengthening family bonds and to the well-being of each family member. Indeed, a precedent for treating medical conditions in this manner already exists. Our medical approach to glucose testing during pregnancy provides an informative analogy. Testing for hyperglycemia is routine with



the goal of identifying diabetes and preventing associated complications. When diabetes is identified, the mother who goes off her diet or has a newborn jittery from hypoglycemia is neither reported to child protective services nor incarcerated despite failure to adhere to a medical treatment plan. Hence, physicians are not caught between the Scylla and Charybdis of ignoring a medical issue or risking their patient's incarceration and her child's exposure to foster services, many of which are facing system-wide lawsuits that claim abuse and neglect of children (including placement with a convicted rapist), dangerously high case-loads for social workers, and serious foster home shortages.² That choice—caring and harming or neither—is, unfortunately, the status quo with opioid use even when, as several court cases exemplify, the drug has been prescribed by a physician. For example, a woman who had been adherent to methadone treatment was determined to have abused and neglected her newborn because her child developed neonatal abstinence syndrome. Although the decision was ultimately overturned,³ the mother spent 3 years carrying a child abuse sentence.

What then would be the most clinically efficacious and ethically acceptable approach to determining whether a fetus is at risk of neonatal abstinence syndrome? In theory, four approaches are possible: 1) selective drug testing (eg, toxicology tests), 2) universal drug testing, 3) selective drug screening (with validated questionnaires), and 4) universal drug screening. Each of these approaches has potential advantages and potential pitfalls.

The goal of any screening program is the identification of individuals with a medical disease amenable to improvement with appropriate intervention. Unfortunately, the consequences of a positive screen for substance use are often far from salutary. In the United States, 18 states define substance use as child abuse, and three states consider it grounds for civil commitment⁴ and any state can arrest, prosecute, or incarcerate pregnant women for drug use and they have. A recent investigation discovered examples in at least 45 states of prosecution and punishment of pregnant women for drug use.⁵ Additionally, the Child Abuse Prevention and Treatment Act requires all states to have policies to notify child protective service agencies of substance-exposed newborns. Therefore, the consequences of a positive screen for drug use in pregnancy often include a response beyond medical assessment, treatment, and referral.

Selective drug testing would allow health care providers to narrowly focus on those at greatest risk, thereby achieving efficiency and specificity. What

would make this approach ethically parlous, however, would be the strong possibility of bias, explicit at worst, implicit at best. The implicit association test is a method for gauging the degree to which judgment is weighted by subconscious bias. Experimental results have confirmed the extent to which our perceptions of social groups shape our judgments of individual character and potential.⁶ In his book, *Blink* Gladwell⁷ described an example of judgments that were rendered during orchestral auditions. When panels charged with choosing new members for orchestras were not “blinded,” when they both listened and watched performances, the candidates who earned spots in top orchestras were overwhelmingly male. The judges avowed that bias against women played no role in their decisions; however, when the musicians were moved to the other side of a curtain, outside the view of the judges, women started to earn more places in top orchestras. Candidates for drug screening have not yet moved behind the curtain.

In fact, studies have clearly demonstrated racial bias in prenatal drug testing. In a classic paper by Chasnoff,⁸ urine toxicologies were anonymously collected over 6 months. During this time, 133 women in Pinellas County were reported to health authorities after delivery. Despite similar rates of substance use among blacks and whites in the study, black women were reported to social services at approximately 10 times the rate for white women, and poor women were more likely than others to be reported. Similar findings have been more recently reported. Ellsworth⁹ used the electronic medical records and assessed drug screening rates among 2,121 mother-newborn pairs to determine the strongest predictors of whether a neonate was screened. Neonates born to black mothers were more likely to have screening performed whether they met screening criteria (35.1% compared with 12.9%; $P<.001$) or not (5.3% compared with 1.2%; $P<.001$). In a logistic regression analysis, black race remained independently associated with drug screening even when controlled for the standard screening criteria, income, insurance status, and maternal education.

Universal testing avoids the risk of implicit bias and has the advantage of simplicity; health care providers need not be familiar with algorithms of risks to determine who needs a toxicology assessment. The inability of busy clinicians to remember which groups are at risk for a given disease is evidenced by the fact that universal glucose screening has become common practice in prenatal clinics despite the fact that by guideline it is acceptable to select out low-risk women who do not need screening. Hence, what



universal testing lacks in specificity, it makes up for in simplicity and sensitivity. However, what makes it untenable in the case of drug testing are at least two ethical-legal roadblocks.

The first is the Fourth Amendment of the Constitution that prohibits unreasonable searches and seizures and requires any warrant to be judicially sanctioned and supported by probable cause. That point was driven home by the case of *Ferguson v City of Charleston* in 2001. In a six to three ruling, the Supreme Court stated that drug testing by a public hospital in Charleston, South Carolina, violated the Fourth Amendment of the Constitution although the hospital was putatively trying to prevent women using crack cocaine from harming their fetuses.¹⁰ That ruling might not be dispositive in regard to all hospital-based drug testing of pregnant women. Rather, it could be more narrowly interpreted as a check on only governmental bodies because the hospital in Charleston was a state institution and Ms Ferguson was reported to a governmental agency (the police) based on the results of her drug test. A more encompassing ethical constraint on universal counseling was eloquently expressed by Benjamin Cardozo who, when writing the majority decision in a case that established the right of informed consent, said, "Every human being of adult years and sound mind has a right to determine what shall be done with his own body."¹¹ Although the obligation to obtain consent might, *de facto*, be dealt with in a pro forma manner in many circumstances (ie, using a hospital's global consent for care to handle inconsequential matters such as performing a blood count), it would be risible to assert that it would not require a more rigorous application for a test with the potential life-altering consequences of a drug assay. Consequently, it would be reasonable to infer and would comport with normative ethics to conclude (as has the American College of Obstetricians and Gynecologists) that pregnant women must provide explicit consent for urine drug testing and, consequently, they also have the right to refuse testing.¹²

An alternative to testing biologic samples would be to screen women using a validated questionnaire. Again, the options with a questionnaire would be to apply the instrument selectively (eg, to those at increased likelihood of substance use) or to apply it universally. Unfortunately, the selective approach would have all of the shortcomings of a policy of selectively applied toxicology testing without the commensurate sensitivity and specificity. Health care providers are likely to let their assumptions influence who they ask to complete the questionnaire and could

even influence the manner in which the screen is performed and its results interpreted.

We would argue that a policy of universal and uniformly performed questionnaires would be the most appropriate approach to the problem. With such a policy, all women, regardless of any preconceived notions of health care providers, would complete a questionnaire, which would allow their physicians to identify, and provide services to, any women with evidence of substance use. Universal screening is recommended by the American College of Obstetricians and Gynecologists, the American Academy of Pediatrics, the American Medical Association, and the Centers for Disease Control and Prevention.¹³ Although no single instrument has proven superior, several have been validated among pregnant women.¹⁴

Given the social risks and possible medical benefits (albeit perhaps currently only in an ideal world) of identifying drug using pregnant women, what approach should an ethical obstetrician support? We would start with principles. We are physicians writing for physician readers. As such, we believe that it should be accepted, *res ipsa loquitur*, that drug use is a medical condition, not a moral failing. Although this may seem intuitively correct to many readers, it is not a universally agreed-on doctrine. A study in 2002 reported that 45% of physicians favored statutes that defined substance use during pregnancy as a form of "child abuse."¹⁵ That clash of attitudes will ultimately undermine any attempt to achieve a consensus approach to optimizing maternal and fetal well-being. Our second supposition is that, as noted previously in this article, using the best questionnaires available and applying them universally and uniformly has the best chance of identifying, in a nondiscriminatory fashion, women who need help. Third, we should be clear about our goals. Testing should result in a medical "good," not merely the capture and stigmatization of those with a disease. The good should pertain to the mother and to the child. Concentrating solely on pregnant women will yield only fragmentary benefits and in its narrow focus could be as easily perceived to be a selective persecution as a rational approach to health care. Indeed, because society's concern should include the home environment into which the neonate will be brought, testing fathers as well as mothers would be logical. If civil liberties be damned in pursuit of neonatal interests, perhaps routine drug testing of obstetricians and anesthesiologists would be justified. When the only suggested targets of testing are pregnant women, they could be perceived as targets of opportunity rather than an appropriate sole focus.



One of the tenets of professionalism is social justice, and as such, physicians must advocate for a system that will decriminalize disease and prioritize treatment.¹⁶ The complexity of strategies required to achieve the best possible outcome for mother, neonate, and family is attributable in no small part to the criminalization of addiction. It forces physicians to prioritize the good of one person over another and of one goal over another. The World Health Organization has defined health as not merely the absence of disease, but the presence of optimal social, psychologic, and physical well-being. Many physicians might be hesitant to label someone with an addiction if, instead of triggering appropriate medical and social interventions, it results in the patient's incarceration or her child's entanglement in a foster care system. Children who spent more than 18 months in custody have been described in a Texas district court ruling as "almost uniformly leav(ing) state custody more damaged than when they entered."²² Under these circumstances, leaving the child with a mother may be preferable to identifying a medical need. As the World Health Organization guidelines for the identification and management of substance use and substance use disorders in pregnancy state, "Prevention and treatment interventions should be provided to pregnant and breastfeeding women in a way that will *prevent stigmatization, discrimination and marginalization*, and promote family, community and social support, as well as social inclusion by fostering strong links with available childcare, employment, education, housing and other relevant services." [Emphasis ours.]¹⁷

In the interim we can adhere to safe prescribing practices; encourage healthy behaviors and provide appropriate information; and finally, identify and refer patients with substance use disorders to addiction treatment professionals. The difficulty of accomplishing these goals is highlighted by the fact only 19 states have specialty drug treatment programs for pregnant women, only 12 provide them with priority access to treatment, and only 4 prohibit discrimination against pregnant women in publically funded programs.⁴ Therefore, although universal, voluntary screening would seem the most reasonable approach to identifying neonates at risk of neonatal abstinence syndrome; physicians should advocate for that only as strongly as they advocate for social support and addiction care services for those subsequently identified.

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