

Criminal Charges for Child Harm from Substance Use in Pregnancy

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Despite the opposition of medical and public health professionals, several state legislatures are considering laws that permit child abuse charges for substance use during pregnancy. We reviewed legal decisions regarding women charged with a crime against a fetus or child as a result of substance use during pregnancy. We identified 24 judicial opinions published between 1977 and 2015 in cases involving 29 women prosecuted in 19 states. Charges included child endangerment, child abuse, drug delivery, attempted aggravated child abuse, chemical endangerment of a child, child neglect, child mistreatment, homicide, manslaughter, and reckless injury to a child. The substances related to the charges included cocaine, heroin, methamphetamine, marijuana, and prescription pills. Proceedings resulted in dismissal of the charges or convictions overturned for 86.2 percent of the women. In all of the cases, the judicial decision depended on the disposition of the question of whether, for the purpose of adjudicating the criminal charges, a fetus is a child. The balance in the courts in favor of treating substance use during pregnancy as a medical problem depends on the definition of a child for the purposes of criminal statutes. Professional advocacy may best be directed at state legislatures.

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Criminalization of substance use during pregnancy because of harm to the fetus or child is fiercely debated. Some policymakers and law enforcement officials argue that criminal punishment deters substance use among pregnant women.^{1–3} In contrast, the medical model of addiction views substance use disorders as chronic, relapsing diseases, with substance abuse during pregnancy an unfortunate, but common occurrence. In the medical model, treatment, not punishment, is the remedy to reduce consumption of substances during pregnancy.⁴ Medical and public health experts are widely opposed to efforts to criminalize substance use by pregnant women.^{5–8}

Reflecting societal uncertainty about the best approach, legal penalties for substance use during preg-

nancy because of harm to the fetus or child vary significantly among the states. Civil child abuse proceedings are explicitly permitted in 18 states.⁹ These may lead to termination of parental rights, but not to prison sentences. Tennessee is the only state that has enacted a law that targets substance use by pregnant women on the basis of presumed harm to the fetus or child. The state legislature passed the law in 2014 explicitly to permit criminal assault charges for illicit substance use in pregnancy and, on conviction, imprisonment.¹⁰ The impetus for the law was rapidly rising rates of neonatal abstinence syndrome, an opioid withdrawal syndrome in infants that may require prolonged monitoring in intensive care units.¹² The law expired on July 1, 2016, based on a sunset provision in the original bill.¹⁰ No other states have similar criminal statutes, but two other state legislatures recently debated criminalization to combat the opioid epidemic.^{13,14}

Despite a lack of criminal statutes specifically targeting substance use by pregnant women in other states, women have been charged and, infrequently, convicted of a range of criminal offenses for illicit substance use while pregnant, including child abuse, assault, manslaughter, and murder.¹⁵ In two states,

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South Carolina and Alabama, these convictions have been upheld by the state supreme court.^{16–18} The effect of these rulings is to permit women to be convicted for substance use during pregnancy under existing laws that are not specific to pregnancy. To date, the United States Supreme Court has declined to hear cases that raise questions about the constitutionality of such laws.

A substantial body of legal literature traces the development of case law related to substance use during pregnancy and problems with criminalization of pregnant women.^{15,19–23} In this article, we systematically review published legal cases of women charged with offenses causing harm to their fetus or child as a result of substance use during pregnancy, wherein the trial court decision was appealed. Given the opposition of medical and public health professionals to the criminalization of substance use during pregnancy, an understanding of both the range of criminal charges pregnant substance users may face and the role, if any, that medical expertise has played in the adjudication of these cases would inform understanding of the problem and of medical professional advocacy efforts.

Methods

For the purpose of this review, we identified published legal decisions regarding women criminally charged with a crime against a fetus or child for substance use during pregnancy from appellate level courts. Exact terminology for relevant crimes varies across states and broad inclusion criteria were used for initial case review. Cases wherein charges resulted in civil proceedings only (e.g., custody proceedings) were not included.

We conducted a LexisNexis search of published U.S. state and federal cases in these categories using the following search terms: pregnant OR pregnancy AND cocaine OR methadone OR heroin OR controlled substance OR methamphetamine OR narcotic AND child abuse OR child neglect OR child endangerment OR assault OR homicide OR murder OR manslaughter. The search yielded 77 published cases, of which, on closer review, 16 were found to be relevant. Additional cases were identified by reviewing the cases cited in the initial set of cases and published literature, yielding an additional nine cases. All of these cases were appellate decisions except for one published trial court decision,²⁴ which we discuss separately, given that trial court decisions

are not typically published and do not resolve matters of law.

For each case, we recorded the charges, the substance abused, neonatal outcome, legal resolution of the case, and judicial reasoning. We also identified judicial references to expert or fact witness medical testimony and to medical literature or medical or public health-related *amicus* briefs. We developed categories of relevant variables to code *a priori*. One of the authors read six cases in random order, abstracting data into the identified categories of variables to determine the applicability of the *a priori* coding scheme. Based on results of this analysis, the authors jointly finalized the coding scheme, which was then applied to all of the identified cases.

Results

Case Characteristics

A total of 24 published judicial opinions met the inclusion criteria (Table 1). These 24 cases included 29 women in 19 states who were prosecuted for criminal charges related to harm to a fetus or child as a result of substance use during pregnancy. Charges included child endangerment ($n = 11$), child abuse ($n = 6$), drug delivery ($n = 4$), attempted aggravated child abuse ($n = 2$), chemical endangerment of a child ($n = 2$), child neglect ($n = 1$), child mistreatment ($n = 1$), homicide ($n = 1$), manslaughter ($n = 1$), and reckless injury to a child ($n = 1$). The first case was adjudicated in 1977 and the last case in 2015. Cases were decided by state supreme courts ($n = 15$) and state courts of appeals ($n = 14$). Although the legal bases for appellate court decisions varied (see Table 1), the functional outcome was that the charges were dismissed ($n = 14$) or convictions overturned ($n = 11$) for 86.2 percent of the women (25/29). Convictions were upheld only in Alabama and South Carolina, involving a total of four women.

The substances related to the charges were cocaine ($n = 15$), methamphetamine ($n = 10$), heroin ($n = 2$), marijuana ($n = 1$), oxycodone ($n = 1$), and unspecified prescription pills ($n = 1$). The pregnancies had the following outcome: no adverse effects of the substance reported ($n = 12$), withdrawal symptoms ($n = 7$), prematurity and/or small size at birth ($n = 5$), death in the neonatal period ($n = 3$), and stillbirth ($n = 2$). Fetal or infant toxicology was reported in 24 of the pregnancies, and included positive findings for cocaine

Table 1 Cases of Women Charged With Child Abuse-Related Crimes for Substance Use During Pregnancy

Year	Case	Defendant	State	Court Level	Charge	Substance Related to Charge	Neonatal Outcome	Procedural History	Legal Outcome
1977	Reyes v. Superior ²⁵	Margaret Velasquez Reyes	California	State court of appeals	Child endangerment	Heroin	Heroin withdrawal	Trial court denied a motion to dismiss the charge. The appellate court reversed the denial.	Pretrial dismissal
1991	State v. Gethers ²⁶	Cassandra Gethers	Florida	State court of appeals	Child abuse	Cocaine	Neonatal death	The appellate court affirmed the trial court's dismissal of the charge.	Pretrial dismissal
1991	People v. Hardy ²⁷	Kimberly Hardy	Michigan	State court of appeals	Child abuse; delivery of a controlled substance	Cocaine	Small for gestational age and premature	The circuit court dismissed the child abuse charge, but denied a motion to dismiss the delivery charge. The appellate court reversed the denial to dismiss the delivery charge.	Pretrial dismissal
1992	State v. Luster ²⁸	Darla Michelle Luster	Georgia	State court of appeals	Delivery of a controlled substance	Cocaine	No adverse effects reported	The appellate court affirmed the trial court's dismissal of the charge.	Pretrial dismissal
1992	Johnson v. State ²⁹	Jennifer Clarise Johnson	Florida	State supreme court	Delivery of a controlled substance to a minor	Cocaine	No adverse effects reported	Johnson was convicted at trial. The appellate court certified a question to the state supreme court as to whether the relevant statute applied to a drug that was transmitted via the umbilical cord in the time after delivery before the cord was clamped. The state supreme court found that the statute did not apply, and the conviction was overturned.	Conviction overturned
1992	State v. Gray ³⁰	Tammy Gray	Ohio	State supreme court	Child endangerment	Cocaine	Hospitalized several days after birth for cocaine withdrawal symptoms	The state supreme court affirmed the denial of prosecution issued by the lower appellate court.	Pretrial dismissal
1993	Commonwealth v. Welch ³¹	Connie Welch	Kentucky	State supreme court	Child abuse	Oxycodone	Drug withdrawal symptoms	Welch was convicted at trial. She was sentenced to five years for abuse and two years for drug possession to run consecutively. The appellate court affirmed the possession conviction and vacated the abuse conviction. The state supreme court affirmed the appellate court's decision.	Conviction overturned
1994	Sheriff, Washoe County, Nevada v. Encoe ³²	Cathy Encoe	Nevada	State supreme court	Child endangerment	Methamphetamine	No adverse effects reported	The district court granted Encoe's pretrial writ of <i>habeas corpus</i> . The state supreme court affirmed the order.	Pretrial dismissal
1994	Collins v. State ³³	Debra Ann Collins	Texas	State court of appeals	Reckless injury to a child	Cocaine	Cocaine withdrawal	Collins was convicted on a plea of <i>nolo contendere</i> and sentenced to one year. The appellate court overturned the conviction.	Conviction overturned
1995	Reinesio v. Superior Court ³⁴	Teresa Lopez Reinesio	Arizona	State court of appeals	Child abuse	Heroin	Hospitalized for one month for heroin withdrawal	Trial court denied a motion to dismiss the charge. The appellate court reversed the denial.	Pretrial dismissal

Criminal Charges for Substance Use During Pregnancy

Table 1 (Continued)

Year	Case	Defendant	State	Court Level	Charge	Substance Related to Charge	Neonatal Outcome	Procedural History	Legal Outcome
1996	Dunn v. State ³⁵	Selena Dunn	Washington	State court of appeals	Criminal mistreatment	Cocaine	Premature birth, small size (4 pounds, 9 ounces at birth), <i>placenta abruptio</i> , and blindness	The trial court dismissed the charge. The appellate court affirmed.	Pretrial dismissal
1997	Whitner v. State ¹⁶	Cornelia Whitner	South Carolina	State supreme court	Criminal child neglect	Cocaine	No adverse effects reported	Defendant pleaded guilty and was sentenced to eight years. She filed a petition for postconviction relief, which was granted on the basis of ineffective counsel and lack of subject matter jurisdiction. The state supreme court reversed. The U.S. Supreme Court denied her writ of <i>certiorari</i> .	Conviction upheld
2003	McKnight v. State ¹⁷	Regina Denise McKnight	South Carolina	State supreme court	Homicide	Cocaine	Stillbirth	The first trial resulted in a mistrial. Defendant was convicted at the second trial and sentenced to 20 years, suspended to 12 years. The state supreme court affirmed the trial court's ruling. The U.S. Supreme Court denied her writ of <i>certiorari</i> . Later defendant won postconviction relief at the state supreme court for ineffective assistance of counsel after the court found that her lawyer failed to introduce expert testimony about placental infection as a potential cause of fetal death. She agreed to plead guilty in exchange for an agreement that she would be sentenced to time served (8 years) rather than face a new trial. ⁴⁶	Conviction upheld on appeal, though defendant later received relief.
2005	State v. Aiwohi ³⁶	Tayshea Aiwohi	Hawaii	State supreme court	Manslaughter	Methamphetamine	Neonatal death	After her motions to dismiss the charges were denied by the trial court, defendant was convicted on a <i>nolo contendere</i> plea. The state supreme court reversed the trial court's denial of the motion to dismiss.	Conviction overturned
2005	Richards v. State ³⁷	Jessica Renee Richards	Tennessee	State court of appeals	Attempted aggravated child abuse	Methamphetamine	No adverse effects reported	Richards pleaded guilty and was sentenced to 12 years. Her motion for postconviction relief for ineffective counsel based on failure to inform her that her conduct fell outside the scope of the law was denied. The appellate court reversed the denial.	Conviction overturned

Table 1 (Continued)

Year	Case	Defendant	State	Court Level	Charge	Substance Related to Charge	Neonatal Outcome	Procedural History	Legal Outcome
2005	Richards v. Tennessee ³⁷	Jennifer Lynne Horne	Tennessee	State court of appeals	Attempted aggravated child abuse	Methamphetamine	No adverse effects reported	Like Richards (see previous case), Horne pleaded guilty and was sentenced to 12 years. She joined Richards' motion for postconviction relief as above.	Conviction overturned
2006	Kilmon v. State ³⁸	Regina Kilmon	Maryland	State court of appeals	Reckless endangerment	Cocaine	Baby small (5.5 pounds)	Kilmon pleaded guilty and was sentenced to four years. The state court of appeals granted certiorari, joining her case with Cruz's. The convictions were overturned in each case.	Conviction overturned
2006	Kilmon v. State ³⁸	Kelly Lynn Cruz	Maryland	State court of appeals	Reckless endangerment	Cocaine	Baby small (3 pounds 2 oz) and premature (29 weeks)	Cruz was convicted at trial and sentenced to five years. Her appeal was joined with Kilmon's, as above.	Conviction overturned
2006	State v. Martinez ³⁹	Cynthia Martinez	New Mexico	State court of appeals	Felony child abuse	Cocaine	Baby "borderline" small for gestation age and premature (36 weeks)	Martinez's motion to dismiss was denied by the trial court. She was convicted on entering a conditional plea of guilty. The appellate court reversed the denial of the motion to dismiss.	Conviction overturned
2007	State v. Wade ⁴⁰	Janet S. Wade	Missouri	State court of appeals	Child endangerment	Methamphetamine and marijuana	No adverse effects reported	The appellate court affirmed the trial court's dismissal of the charge.	Pretrial dismissal
2007	State v. Hudson ⁴¹	Lisa Ann Hudson	Tennessee	State court of appeals	Aggravated child abuse and neglect	Cocaine	Cocaine withdrawal	Trial court denied a motion to dismiss the charge. The appellate court reversed the denial.	Pretrial dismissal
2009	State v. Geiser ⁴²	Michelle Behles Geiser	North Dakota	State supreme court	Child endangerment	Prescription drugs (not specified)	Stillbirth	The trial court denied a motion to dismiss the charge. Defendant was convicted on entering a conditional guilty plea. The state supreme court reversed the denial.	Conviction overturned
2010	Cochran v. Commonwealth ⁴³	Ina Cochran	Kentucky	State supreme court	Child endangerment	Cocaine	No adverse effects reported	The appellate court reversed the trial court's dismissal of the charge. The state supreme court reversed the appellate court.	Pretrial dismissal
2013	Ankrom v. State ¹⁸	Amanda Helaine Kimbrough	Alabama	State supreme court	Chemical endangerment of a child	Methamphetamine	Died 19 minutes after birth	The trial court denied Kimbrough's motion to dismiss the charge. She pleaded guilty and was sentenced to 10 years. The appellate court affirmed her conviction. The state supreme court, joining her appeal with Ankrom's (see following case), affirmed the appellate court. The U.S. Supreme Court denied Kimbrough's writ of certiorari.	Conviction upheld

Criminal Charges for Substance Use During Pregnancy

Table 1 (Continued)

Year	Case	Defendant	State	Court Level	Charge	Substance Related to Charge	Neonatal Outcome	Procedural History	Legal Outcome
2013	Ankrom v. Alabama ¹⁸	Hope Elisabeth Ankrom	Alabama	State supreme court	Chemical endangerment of a child	Cocaine	No adverse effects reported	The trial court denied Ankrom's motion to dismiss the charge. She pleaded guilty and was sentenced to three years in prison, suspended to one year's probation. The appellate court affirmed her conviction. The state supreme court joined her case with Kimbrough's and affirmed her conviction.	Conviction upheld
2013	State v. Stegall ⁴⁴	Alexis Stegall	North Dakota	State supreme court	Child endangerment	Methamphetamine	No adverse effects reported	The state supreme court affirmed the trial court's dismissal of the charges.	Pretrial dismissal
2013	State v. Stegall ⁴⁴	Chelsea Hettich	North Dakota	State supreme court	Child endangerment	Methamphetamine	No adverse effects reported	The state supreme court affirmed the trial court's dismissal of the charges.	Pretrial dismissal
2013	State v. Stegall ⁴⁴	Kimberlie Nicole Lamon	North Dakota	State supreme court	Child endangerment	Methamphetamine	No adverse effects reported	The state supreme court affirmed the trial court's dismissal of the charges.	Pretrial dismissal
2015	Arms v. State ⁴⁵	Melissa McCann Arms	Arkansas	State supreme court	Introduction of a controlled substance into the body of another person	Methamphetamine	Drug withdrawal symptoms	The trial court denied defendant's motion to dismiss the charge. She was convicted at trial and sentenced to 20 years. The court of appeals affirmed her conviction. The state supreme court reversed.	Conviction overturned

($n = 13$), heroin ($n = 1$), and methamphetamine ($n = 8$) and one case wherein testing was negative for the relevant drug oxycodone, but the infant nonetheless displayed signs of withdrawal.³¹

Rationale for Decisions

In the 22 judicial opinions wherein charges were dismissed or convictions overturned, all held that the legislature did not intend to include fetuses in the definition of a child or victim in the relevant statute. A representative example is *State v. Wade*, where the court stated, “The plain language of the child endangerment statute does not proscribe conduct harmful to fetuses.”⁴⁰ The courts typically made explicit that any ambiguity in the statutes must be construed liberally in favor of the criminal defendant.

Additional factors were relevant to the stated judicial rationale in at least some of the cases. Twelve opinions noted that other jurisdictions ruled similarly when faced with such cases. Six ruled that the contested application of the statute to conduct during pregnancy violated due process, which requires that criminal offenses be defined in plain language so that an ordinary person has fair notice about the actions proscribed. A representative example of this due process reasoning was expressed by the court in *State v. Martinez*: “To expand the ordinary meaning of this statute would deny Defendant reasonable notice that her actions were criminal, thereby violating her due process rights.”³⁹ Six courts held that allowing the contested statute to apply to prenatal drug use would in effect permit it to be applied to a range of prenatal conduct not previously considered illegal, in effect opening the floodgates to prosecution of pregnant women. An example of this reasoning was articulated by the majority in *State v. Welch*:

The mother was a drug addict. But, for that matter, she could have been a pregnant alcoholic, causing fetal alcohol syndrome; or she could have been addicted to self abuse by smoking, or by abusing prescription painkillers, or over-the-counter medicine; or for that matter she could have been addicted to downhill skiing or some other sport creating serious risk of prenatal injury, risk which the mother wantonly disregarded as a matter of self-indulgence. What if a pregnant woman drives over the speed limit, or as a matter of vanity doesn't wear the prescription lenses she knows she needs to see the dangers of the road? [Ref. 31]

Four courts noted that allowing a conviction would result in an absurd punishment scheme. For example, the Maryland state law that permits manslaughter or murder charges if a person kills a viable fetus has an exception that does not permit a woman

to be charged with manslaughter for actions that led to the death of her own viable fetus. In *Kilmon v. State*, the court said,

[I]t would be an anomaly, indeed, if the law were such that a pregnant woman who, by ingesting drugs, recklessly caused the death of a viable fetus would suffer no criminal liability for manslaughter but, if the child was born alive and did not die, could be imprisoned for five years for reckless endangerment [Ref. 38].

Three courts stated that permitting prosecutions under the contested statute was counterproductive to state policy goals and public health. For example, the court held in *State v. Gethers* that, “fear of prosecution could deter pregnant drug abusers from seeking treatment for drug problems.”²⁶ Thus, all of the courts whose decisions functionally overturned convictions or dismissed charges did so on the basis of legislative intent, but varied with respect to additional supporting legal arguments.

Only two courts found for the defendant, in part on the grounds that there was no medical evidence to support the charge. In *Johnson v. State*, the defendant was charged and convicted of two counts of delivery of a controlled substance to a minor via the umbilical cord after she reported to the treating obstetrician that she had smoked marijuana and crack cocaine the day she went into labor. Her infant tested positive for cocaine shortly after birth. She had given birth approximately one year earlier to a child who had also tested positive for cocaine. The state argued that the drug delivery occurred via the umbilical cord in the period after birth but before the cord was clamped. A neonatologist who was an expert witness for the defense testified that the cocaine derivatives present in the children's urine were from exchange between the womb and placenta during pregnancy and that only a tiny amount of cocaine derivative could have passed through the umbilical cord during the 30- to 60-second period after the child was born and before the umbilical cord was cut. The Florida Supreme Court found the medical testimony inadequate to support the trial court's finding that a “delivery” occurred during the birth process, even if the criminal statute had been applicable.²⁹ In *Arms v. State*, Arms was also convicted of a drug delivery charge that was overturned by the state supreme court, in part on the grounds that the relevant statute, “does not expressly criminalize the passive bodily processes that results in a mother's use of a drug entering her unborn, or newborn child's system.”⁴⁵

Rationale for Dismissal by Trial Court

One published trial court decision was identified.²⁴ In this case, a New York trial court in 1992 dismissed the charge of child endangerment for cocaine ingestion during pregnancy. The infant was born prematurely. The court held that the legislature did not intend for the relevant statute to apply to conduct during pregnancy that affected fetuses. The court also referred to rulings by appellate courts in other jurisdictions that had held similarly in comparable cases.

Rationale for Upholding Convictions

In the three judicial opinions that upheld convictions, the court determined that the legislature intended to include fetuses in the definition of child for the purposes of the relevant statute. The South Carolina Supreme Court in *McKnight v. State*¹⁷ referenced its earlier decision in *Whitner v. South State*¹⁶ when it opined that, “in several cases this Court has specifically held that the Legislature’s use of the term ‘child’ includes a viable fetus.” The court also pointed out that, after the *Whitner* decision, the legislature did not modify the statute to exclude viable fetuses from its definition of child. Similarly, in *Ankrom v. State*, the state supreme court found that “the plain meaning of the word ‘child’ is broad enough to encompass all children—born and unborn.”¹⁸ When fetuses are included in the definition of child, the child abuse statutes are then found to be applicable to the alleged prenatal conduct.

Role of Medical Evidence

Of the 24 judicial opinions, only nine directly referenced medical evidence in the form of medical expert testimony ($n = 7$), published medical literature ($n = 3$), or *amicus* briefs ($n = 1$). Briefs from medical or public health organizations were submitted to the court in seven of the cases, all supporting the defendant’s position. In three of the cases in which medical expert testimony was referenced, the expert testimony was contradictory. For example, Amanda Kimbrough’s child was born prematurely and died shortly after birth, having tested positive for methamphetamine. She was charged with chemical endangerment of a child. The treating pediatrician opined that the cause of death was respiratory arrest secondary to prematurity, whereas the medical examiner said that the cause of death was acute methamphetamine intoxication.¹⁸ Two of the opinions^{16,30}

that directly referenced published medical literature referred to data that supported the conclusion that cocaine use during pregnancy creates a substantial and well-established risk to the unborn child and that this effect is within the scope of public knowledge. The other opinion³³ that directly referenced medical literature did so to demonstrate the range of behaviors that are not legally proscribed (e.g., smoking, failing to obtain prenatal care) that are associated with poor neonatal outcomes.

Discussion

The discourse about criminalization of substance use in pregnancy suggests that women are at serious risk of successful prosecution for illicit drug use during pregnancy.^{8,15} Based on our review of published judicial decisions, this does not appear to be the case in most jurisdictions. Women charged with or convicted of crimes against their child or fetus related to substance use during pregnancy have won on appeal much more often than they have lost. It is, however, not known how many women, if any, have been convicted at the trial court level and not had their case heard at the appellate level.

The underlying legal question considered in the judicial decisions in these cases is whether, for the purpose of adjudicating the criminal charges, a fetus is a child. In Alabama and South Carolina, the majority of state supreme court judges determined that the plain meaning of the word “child” includes a fetus, or in their term, an “unborn child.”^{16–18} In the other 17 states that considered the question, the opposite conclusion was reached: that is, a fetus is not a child in the eyes of the law in those jurisdictions. In other words, the key concern in the judicial decisions to date has turned on the courts’ interpretation of legislative intent. The decisions do not go so far as to say that it would be unlawful for the legislature explicitly to prohibit substance use during pregnancy, although questions about the constitutionality of such an approach have been raised in the legal literature.^{2,3,20} Rather, most of the decisions simply found that the legislature did not intend for the existing criminal laws to apply to prenatal conduct.

At least in theory, legislatures could amend criminal laws to make clear that they intend them to apply to prenatal conduct that affects fetuses. An obvious example is the recent Tennessee law that explicitly made illicit drug use during pregnancy a form of criminal assault. In 2005, the Tennessee Court of

Appeals overturned convictions based on guilty pleas for aggravated child abuse for methamphetamine use during pregnancy in two cases combined as *Richards v. State*.³⁷ The judicial reasoning was that the women received ineffective assistance of counsel, in that their attorneys should have argued that their conduct fell outside the scope of the law, which at that time was intended to apply only to conduct that affected children, not fetuses. After the passage of the 2014 law, this reasoning no longer applied, although it became relevant again with the fetal assault law's expiration in July 2016. In contrast, state legislatures could choose to preclude attempted efforts at prosecution with amendments that make explicit that existing laws are not meant to apply to prenatal conduct that may affect fetuses.

Although briefs from medical or public health organizations supporting the defendants' position were submitted to the court in 29 percent of the cases ($n = 7$), only one majority ruling directly referenced a medical or public health organization *amicus* brief. In other instances, where medical expertise was referenced, it did not necessarily support the defendants' position. In totality, medical expertise seemed to play relatively little role in determining the outcome of most judicial decisions. This conclusion should not be a surprise, given that appellate decisions are based on interpretation of law, not facts. Facts are largely determined at the trial level. The implication for medical experts is that advocacy efforts may be most useful when focused on state legislatures that are contemplating policies to reduce harms associated with prenatal substance abuse. Defense attorneys who represent women charged for prenatal conduct may benefit from resources that clarify the relevant medical concerns. These may include the medical model of substance use disorders,⁴ racial disparities in substance use screening and reporting in pregnancy,⁴⁷ and the difficulty of attributing a particular birth outcome to a single cause.⁴⁸

Criminalization of pregnant women for substance abuse is fraught with problems related to conceptual and practical implementation, even if in theory one believes that substance use in pregnancy is both a moral dilemma and a medical problem. No adverse neonatal outcomes were reported in 41 percent of the pregnancies in this study. The apparent lack of a link between the proscribed conduct and a distinct harm in a large number of the cases is one example of this significant limit to the rationale for criminalization.

More concerning, limited evidence suggests that punitive policies may deter women from prenatal care.^{49–51} These policies also disproportionately affect minority and poor women.^{15,52} For example, in one study, black women who tested positive for substances at birth were reported to authorities at about 10 times the rate of white women, despite similar rates of substance use.⁴⁷ Advocates of the punitive approach assert that drug courts can be used to compel treatment for pregnant women with substance use disorders. Although this may be the case, the medical care mandated by many drug treatment courts falls well below the standard of care required for some pregnant women.^{53,54}

Of note, the cases loosely reflect epidemiological trends in patterns of drugs of choice. Many of the early cases were related to maternal cocaine use, whereas more recent cases tended to involve maternal methamphetamine use. This evolution over time may reflect contemporaneous moral panic linked to the potential deleterious effects of particular substances on fetal outcomes.¹

There are several limitations to this study. We examined only published cases, almost all of which were appellate level decisions. There may be many more unpublished trial decisions, the dimensions of which we have no way of assessing. We do not know the role that medical expertise and testimony played in influencing the judicial outcome at the trial court level. We also were unable to determine the race or economic status of the defendants and do not know if poor or minority women are overrepresented among the defendants. Thus, it is not clear whether racial or economic bias is a factor in these cases. We did not examine judicial decisions regarding women who have faced civil child abuse proceedings related to prenatal substance use. These cases typically involve significant civil matters, such as termination of parental rights or civil commitment to inpatient treatment facilities.^{55,56} There are instances where women have faced civil complaints for behavior that is consistent with current standards of care for medical treatment of addictions. For example, a woman in New Jersey faced civil child abuse and neglect proceedings for complying with her doctor's recommendation to stay on methadone treatment while pregnant,⁵⁷ the gold standard treatment for opioid dependency during pregnancy.⁵³ The proceedings against her were ultimately thrown out by an appellate court.

Medical and public health experts who are desirous of seeing a greater focus on treatment of substance-abusing pregnant women must stay particularly alert to legislative efforts to expand the legal definition of a child to include fetuses or to define prenatal substance use explicitly as a form of child abuse. Both stand to undermine the medical treatment of pregnant women with substance use disorders and potentially increase harm to mothers and children. Future professional advocacy efforts may be most beneficial when directed at state legislatures that are dealing with proposed statutes that address these questions. In jurisdictions where criminal charges are permitted, dispositions for convicted women should be treatment oriented. Psychiatrists should be involved with drug treatment courts to ensure that any court-compelled treatment meets the complex medical and psychosocial needs of pregnant women with substance use disorders.

References

1. Kandall SR: Substance and shadow: women and addiction in the United States. Cambridge, Massachusetts: Harvard University Press, 1996
2. Berrien J: Pregnancy and drug use: the dangerous and unequal use of punitive measures. *Yale J L & Feminism* 2:239–50, 1989
3. Goodwin M: Fetal protection laws: moral panic and the new constitutional battlefield. *Cal L Rev* 102:781–875, 2014
4. Kremer ME, Arora KS: Clinical, ethical, and legal considerations in pregnant women with opioid abuse. *Obstet Gynecol* 126: 474–8, 2015
5. American Academy of Pediatrics Committee on Substance Abuse: Drug-exposed infants. *Pediatrics* 96:364–7, 1995
6. Council on Addiction Psychiatry, American Psychiatric Association: Position statement on the care of pregnant and newly delivered women addicts. *Am J Psychiatry* 149:724, 1992
7. ACOG Committee Opinion No 473. Substance abuse reporting and pregnancy: the role of the obstetrician–gynecologist. *Obstet Gynecol* 117:200–1, 2011
8. Board of Trustees, American Medical Association: Legal interventions during pregnancy: court-ordered medical treatments and legal penalties for potentially harmful behavior by pregnant women. *JAMA* 264:2663–70, 1990
9. Substance abuse during pregnancy. Guttmacher Institute. Available at: https://www.guttmacher.org/statecenter/spibs/spib_SADP.pdf. Accessed March 5, 2015
10. S.B. 1391, H. B. 1295 (Tenn. 2014)
11. Springer D: Tennessee voices: drug use in pregnancy is an epidemic. *The Tennessean*, May 14, 2014. Available at: <http://www.tennessean.com/story/opinion/contributors/2014/05/10/tennessee-voices-drug-use-pregnancy-epidemic/8914401/>. Accessed March 17, 2015
12. H.B. 1660 (Tenn. 2016)
13. S.B. 559 (Okla. 2015)
14. Prenatal Drug Use/Criminal Offense S.B. 297 (N.C. 2015)
15. Paltrow LM, Flavin J: Arrests of and forced interventions on pregnant women in the United States, 1973–2005: implications for women’s legal status and public health. *J Health Pol Pol’y & L* 38:299–343, 2013
16. *Whitner v. State*, 328 S.C. 1 (S.C. 1997)
17. *State v. McKnight*, 352 S.C. 635, 647 (S.C. 2003)
18. *Ankrom v. State*, 152 So.3d 397, 411 (Ala. 2013)
19. DeVille KA, Kopelman LM: Moral and social issues regarding pregnant women who use and abuse drugs. *Obstet Gynecol Clin North Am* 25:237–54, 1998
20. Carlson R: A gap in the criminal justice system, creating a new class of felons in pregnant drug-addicted women, a state-by-state analysis. *Miss L J* 83:71–99, 2014
21. Frierson RL, Binkley MW: Prosecution of illicit drug use during pregnancy: *Crystal Ferguson v. City of Charleston*. *J Am Acad Psychiatry Law* 29:469–73, 2001
22. Johnson K: From the Office of the General Counsel. *Webster v. Reproductive Health services: the AMA position*. *JAMA* 262: 1522, 1989
23. Kampschmidt ED: Prosecuting pregnant women for drug use during pregnancy: the criminal justice system should step out and the affordable care act should step up. *Health-Matrix: J L Med* 25:487–512, 2015
24. *People v. Morabito*, 580 N.Y.S.2d 843 (N.Y. City Ct. 1992)
25. *Reyes v. Superior Court*, 75 Cal. App.3d 214 (Cal. Ct. App. 1977)
26. *State v. Gethers*, 585 So.2d 1140, 1143 (Fla. Dist. Ct. App. 1991)
27. *People v. Hardy*, 469 N.W.2d 50 (Mich. Ct. App. 1991)
28. *State v. Luster*, 419 S.E.2d 32 (Ga. Ct. App. 1992)
29. *Johnson v. State*, 602 So.2d 1288 (Fla. 1992)
30. *State v. Gray*, 584 N.E.2d 710 (Ohio 1992)
31. *Commonwealth v. Welch*, 864 S.W.2d 280, 283 (Ky. 1993)
32. *Sheriff, Washoe County, Nevada v. Encoe*, 885 P.2d 596 (Nev. 1994)
33. *Collins v. State*, 890 S.W.2d 893 (Tex. App. 1994)
34. *Reinesto v. Superior Court*, 894 P.2d 733 (Ariz. Ct. App. 1995)
35. *State v. Dunn*, 916 P.2d 952 (Wash. Ct. App. 1996)
36. *State v. Aiwohi*, 123 P.3d 1210 (Haw. 2005)
37. *Richards v. State*, 2005 Tenn. Crim. App. LEXIS 970 (Tenn. Crim. App. 2005)
38. *Kilmon v. State*, 905 A.2d 306, 314 (Md. 2006)
39. *State v. Martinez*, 137 P.3d 1195, 1198 (N.M. Ct. App. 2006)
40. *State v. Wade*, 232 S.W.3d 663, 665 (Mo. Ct. App. 2007)
41. *State v. Hudson*, 2007 Tenn. Crim. App. LEXIS 496 (Tenn. Crim. App. 2007)
42. *State v. Geiser*, 763 N.W.2d 469 (N.D. 2009)
43. *Cochran v. Commonwealth*, 315 S.W.3d 325 (Ky. 2010)
44. *State v. Stegall*, 828 N.W.2d 526 (N.D. 2013)
45. *Arms v. State*, 471 S.W.3d 637 (Ark. 2015)
46. Greene S. Regina McKnight released from prison. ABC 15 News, 2008. Available at: <http://wpde.com/news/videos/regina-mcknight-released-from-prison/>. Accessed June 20, 2016
47. Chasnoff IJ, Landress HJ, Barrett ME: The prevalence of illicit drug or alcohol use during pregnancy and discrepancies in mandatory reporting in Pinellas County, Florida. *N Engl J Med* 322: 1202–6, 1990
48. Irner TB, Teasdale TW, Nielsen T, et al: Substance use during pregnancy and postnatal outcomes. *J Addict Dis* 31:19–28, 2012
49. Poland ML, Dombrowski MP, Ager JW, et al: Punishing pregnant drug users: enhancing the flight from care. *Drug Alcohol Depend* 31:199–203, 1993
50. Roberts SC, Nuru-Jeter A: Women’s perspectives on screening for alcohol and drug use in prenatal care. *Womens Health Issues* 20:193–200, 2010
51. Schempf AH, Strobino DM: Drug use and limited prenatal care: an examination of responsible barriers. *Am J Obstetr Gynecol* 200:412.e1–412.e10, 2009

52. Roberts SC, Nuru-Jeter A: Universal screening for alcohol and drug use and racial disparities in child protective services reporting. *J Behav Health Serv Res* 39:3–16, 2012
53. The American College of Obstetricians and Gynecologists Committee on Health Care for Underserved Women and American Society of Addiction Medicine: Committee Opinion No 524. Opioid abuse, dependence, and addiction in pregnancy. *Obstet Gynecol* 119:1070–6, 2012
54. Matusow H, Dickman SL, Rich JD, *et al*: Medication assisted treatment in US drug courts: results from a nationwide survey of availability, barriers and attitudes. *J Subst Abuse Treat* 44:473–80, 2013
55. Boudreaux JM, Thompson JW: Maternal-fetal rights and substance abuse: gestation without representation. *J Am Acad Psychiatry Law* 43:137–40, 2015
56. Hall RC, Friedman SH, Jain A: Pregnant women and the use of corrections restraints and substance use commitment. *J Am Acad Psychiatry Law* 43:359–68, 2015
57. *New Jersey Division of Child Protection & Permanency v. Y.N.*, 104 A.3d 244 (N.J. 2014)