Methamphetamine and Pregnancy

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ERROL YUDKO
SANDRA B. MCPHERSON

> The right of the people to be secure in their persons, houses, papers, and effects, against unreasonable searches and seizures, shall not be violated, and no Warrants shall issue, but upon probable cause, supported by Oath or affirmation, and particularly describing the place to be searched, and the persons or things to be seized.
>
> **—The Fourth Amendment of the U.S. Constitution**

Few provisions of the Bill of Rights are as utterly American as the Fourth Amendment of the Constitution. This amendment grew from the experience of the colonials in America as well as from their English roots. "Every man's house is his castle." But what of the body of a woman? This chapter evaluates how the courts attempt to balance the rights of a fetus with the rights of its mother. Is it right for the courts or Child Protective Services (CPS) to remove a child from its mother's care if the newborn tests positive for a drug? Many of us would answer this query with an unquestioning "yes." However, we tend to make that decision based on the assumption that the drug itself is damaging to the fetus. For most drugs (including cocaine and methamphetamine) this has been difficult to demonstrate using the scientific method. For some drugs (including alcohol and tobacco) the relationship between use and fetal damage is quite apparent. The problem with the current picture is that CPS is likely to remove a child from its mother's care if there is evidence that the mother was using methamphetamine during her pregnancy, but not tobacco.

Legal Issues and Status

Individual, social, moral, and legal issues converge when addressing the abuse of methamphetamine by pregnant women and the appropriate societal response. In some ways it might seem that the issue is needlessly complex. Methamphetamine abuse is an illegal activity, punishable within the existing range of statutes at state and federal levels. However, the particular problems that arise in the case of abuse of methamphetamine in pregnancy do in fact involve significant legal questions across different legal venues.

A search of federal appeals and Supreme Court activity has identified several areas of focus and some reasonably inferred trends. Major issues included maternal rights against self-incrimination and vulnerability to punishment on the basis of nonpermitted testing at the time of birth of the child; maternal custody rights; paternal custody and/or visitation rights; and individual rights against unreasonable detention.

Maternal Rights against Self-Incrimination and Vulnerability to Punishment Based on Drug Testing by Hospitals

Decisions that have been rendered and, for that matter, statutes that have been passed in various states, have tended to support incursions into the rights of mothers to protect or secure the needs of children. Certainly such decisions rest on a long-established principle that the needs of the youngest members of society are paramount. However, the cases themselves illustrate not only abstract legal issues but also lifestyles and behaviors that are well known in the field of substance abuse. Although methamphetamine use figures in the cases, sometimes very prominently, it is rarely the only basis on which decisions have been rendered.

Although cases reviewed at levels below the Supreme Court have tended to support protection of unborn and newly arrived children, the one Supreme Court case on point is *Ferguson et al. v. the City of Charleston et al.* (2001). In that case, a state hospital had used a urine sample from a mother without her permission to check for cocaine in collaboration with law enforcement to identify cocaine abusers and to obtain evidence against them. The Supreme Court, in a six-to-three decision, considered it to be an unreasonable search, if not an unholy alliance. The purposes and the process, however, distinguished that case from others at lower appeals levels where both state laws and individual actions on the part of law enforcement and other agencies have been upheld.

Maternal Custody Rights

The *Ferguson* case generated significant interest, both from the standpoint of its implications for criminal justice and because of the conflicting issues and

values it addressed. Ely (2001), writing in the *Chicago Daily Law Bulletin*, noted with approval that testing of women and other aspects of their medical care during pregnancy could not be a basis for criminal prosecution. Similarly, in *The Legal Intelligencer*, Mauro (2001) cited Justice Stevens' position that the prosocial motives of the government could not become the basis for the loss of Fourth Amendment protections. However, the limits to which the *Ferguson* decision would be tolerated were illustrated in Flumenbaum and Karp's (2000) review of the case of *Kia P. v. Long Island College Hospital* (2000). Noting the *Ferguson* decision, the authors nonetheless detailed the basis for dismissal of a lawsuit against the hospital by Kia P. who alleged impropriety by the institution for withholding her child Mora following the birth. The hospital acted on a "good faith" basis due to possible methadone withdrawal symptoms and test findings in the newborn which, if present, could be life threatening (and would mean that the mother had abused the drug during her pregnancy). The appeals court finding affirmed the lower court that no violations existed with respect to Fourth Amendment (due process) rights.

Review of Table 13.1 indicates a clear trend to support the needs of a child born or unborn and other children who may be affected as well. Thus, in decisions regarding custody, usually emanating from juvenile court actions and child protection agency motions for termination of parental rights, the appeals courts have generally acted to protect the children. Certain presumptions are made in these cases and are sometimes detailed in the decisions. Those presumptions include the following:

- Ample scientific evidence proves that maternal use of methamphetamine and other substances does, in fact, cause damage to the developing fetus.
- Maternal involvement in lifestyles where illicit drug abuse is a prominent feature usually renders the mother unable to assert adequate responsibility for a child or children.

Very often, courts proceed from a best interest posture rather than one of requiring proof of child endangerment. For example, in two cases, while some aspects of the family situation improved, the children's ages, conditions, and histories were such that placement of them with their biological parents — whose stability was insecure at best — was viewed as an unacceptable experiment (*In the interest of C.E.*, 2001; *In the interest of M.S.D. and M.A.D.*, 2001).

Paternal Custody Rights

Fathers' rights can also be affected by maternal drug use in pregnancy. In *Michael M. v. Arizona* (2002) the mother had used during pregnancy. After

Table 13.1 Cases from Lower Courts of Appeal across Several U.S. Jurisdictions (1994–2002)

Case Name	LEXIS Cite	Trial Court Action[a]	Appeals Court Action[a]	Methamphetamine Factor[b]
Sheriff, Washoe County Nevada v. Cathy Encoe	1994 Nev. LEXIS 156	Mother guilty of child endangerment	Affirmed	C MU
In re Guardianship of Travis Alexander Zyler	1996 Neb. LEXIS 208	Appointment of guardian	Remanded Direction to Vacate; dissolution pending by mother	MU
In re the matter of Malachi Eugene Ettinger	1996 Ore. App. LEXIS 1380	Denial of motion for TPR	Reversed Remanded for TPR	MU
In re the welfare of D.F. David Bryant	1998 Wash. App. LEXIS 676	TPR	Affirmed	MU C (F)
In re Brittany C.	1999 Cal. App. LEXIS 1058	TPR	Affirmed	Mus
In the matter of Jane Doe	1999 Ida. App. LEXIS 95	TPR	Affirmed	MU C N
In re Bethany M.	1999 Neb. App. LEXIS 118	TPR	Affirmed	MU
In the matter of Christian Wilcox and Savannah Wilcox	1999 Ore. App. LEXIS 1561	Denial of motion for TPR	Reversed Remanded	MU C
Connie B. v. Sup. Ct. of San Diego County	2001 Cal. App. LEXIS 1812	TPR	Affirmed	Mus C N

In re Juanita C.	2001 Cal. App. LEXIS 3789	TPR	Affirmed	MU C
In the interest of M.S.D. and M.A.D.	2001 Iowa App. LEXIS 588	TPR	Affirmed	Mus
In the interest of C.E.	2001 Iowa App. LEXIS 649	Denial of TPR	Reversed remanded	MU
In the matter of the Unborn Child of Julie Starks	2001 Okla. LEXIS 7	Custody of fetus by holding the mother	Vacated order to dismiss	M,F/P
In the matter of Selana Lee Lucas	2001 Ore. App. LEXIS 1589	TPR	Affirmed	MU C
Michael M. v. Arizona Department of Economic Security and Corianna M.	2002 Ariz. App. LEXIS 34	TPR	Affirmed	MU C
Michelle K. v. Sup. Ct. of Los Angeles County	2002 Cal. App. LEXIS 385	TPR	Affirmed	MU
In re Alejandra P.	2002 Cal. App. LEXIS 702	TPR	Affirmed	MU C
Amber A. v. Sup. Ct. of Orange County	2002 Cal. App. LEXIS 2075	TPR	Affirmed	MU C
Fernando C. v. Sup. Ct. of San Diego County	2002 Cal. App. LEXIS 2783	TPR	Affirmed	MU FU

[a] Court actions: TPR = termination of parental rights.

[b] Methamphetamine factors: MU = use in pregnancy; C = child tested positive for methamphetamine at birth; FU = father use of methamphetamine; (F) = father unable to provide for child; M,F/P = production of methamphetamine by mother and father; N = neglect by virtue of use.

birth, the child was placed first in foster care and then with a relative. In the meantime, the father was incarcerated on charges unrelated to drug abuse, but had petitioned for contact with the child. He was denied contact by the children's services department, an action subsequently ordered by the juvenile court. That court also denied him any opportunity to see his child during the court session even though visitation could have been easily accomplished. The court took the position that since the father was in prison, he did not deserve to see his child until he was released and further stated the child would likely be harmed by prison visitation. The appeals court indicated no support for the notion of harm to the child and also noted that a visit at the time of the original court hearing, now moot, had not merited an outright rejection.

Culture

Some cases revolved around rather unusual factors. In one, the appeal of the mother was joined by the Native American tribe to which she belonged. It was asserted that the state had failed to provide an appropriate expert witness at the time restoration of parental rights was refused. There was further assertion that the state should have turned over jurisdiction to the tribe. However, the trial court was affirmed. The reasoning at the appeals level was that no cultural issues presented and therefore the law requiring an expert with Native American cultural background did not apply in this case. The appeals court felt the basic requirements for health and safety and security of the child were not met by the mother and could not be reasonably anticipated to be present in the future (*In the matter of Selana Lee Lucas*, 2001).

Rights of the Fetus

Although most decisions favored termination of parental rights, one illustrated a ruling favoring appellant mother (*In the matter of the unborn child of Julie Starks*, 2001). In that case, the Superior Court of Oklahoma remanded a case on the basis that the unborn fetus was not a child under the Oklahoma Children's Act. This case involved the trial court ordering the detention of the mother through the duration of her pregnancy to prevent her ongoing involvement with methamphetamine from damaging the unborn child. However, the issue of the rights of the fetus was also addressed somewhat earlier in *Sheriff, Washoe County, Nevada v. Cathy Encoe* (1994). There the court reasoned that transmission of methamphetamine through the umbilical cord after birth but prior to its being severed allowed the finding that injury to a child rather than to a fetus had occurred. On that basis, a criminal finding of child endangerment by the mother was affirmed.

Cases involving parental and fetal rights as well as individual freedoms have generated journal commentary. Janssen (2000) directly addressed both methamphetamine cases and the particular balancing of the rights of the different entities that become involved in methamphetamine use in pregnancy. Individuals have been convicted of killing unborn children, but mothers have the right to abort. The issue becomes one of at what point the mother's willful use of a harmful substance and her decision not to abort constitute a basis for action to be taken against her.

In the face of a rising awareness of methamphetamine abuse and the inability to treat the fetus as a child under existing laws, various states have acted to pass legislation protecting the rights of the fetus. In Missouri, the approach was to confer all rights of citizenship of a minor on the unborn child. Other states have been somewhat less generous but the trend is clear. In Iowa, where there had been a restriction against criminal penalties for mothers who used methamphetamine, a movement has surfaced to support stiffer penalties specific to methamphetamine abuse. Cited was a 1994 study that found that 4% of infants born during that year were exposed to illegal substances and that nearly half of all these newborns were born to methamphetamine users. The backlash of punitive reactivity, occasioned by the rise in methamphetamine use and its destructive impacts in the country, is perhaps best illustrated in the following sequence. In 1997, the Georgia Court of Appeals had rejected an attempt to charge a woman in connection with pregnancy drug use. Further, in 1998, a woman who shot herself in an attempt to perform an illegal abortion was successful in having the charges dismissed. In 1999, a case involved a woman who gave birth to twins. One died. The death was attributed to the mother's use of drugs, including specifically amphetamines. She was charged with murder for causing the child's death (Renaud, 1999).

Legal Perspectives — Summary Statement

In effect, a legal, social, and psychological quagmire exists in the case law and statutes that address methamphetamine abuse in pregnancy. Liberals and conservatives rightly can view perilous "slippery slopes" in any attempts to deal with this area in the context of the courts or by statutory remedy. In the meantime, there is an insecure scientific foundation for raising the issues and the application of legal sanctions varies not by degree of scientific foundation but by social attitudes and political practicalities. As can be seen in the following section detailing scientific findings, the methamphetamine impacts on fetal well-being may well be significantly less than use or abuse of legal drugs for which no loss of citizen rights is a consequence.

The Effect of Methamphetamine on the Fetus

Significant work identifying methamphetamine use in relation to different factors associated with fetal development has not yet been accomplished. Much of what is known comes from studies of cocaine abuse during pregnancy. It is well established that some drugs have more negative impacts on the fetus than others. Therefore, conclusions derived from the following cocaine studies have to be viewed as tentative.

In the 1980s the fear of cocaine-addicted babies was extreme in the medical and legal communities. It is now known that the picture of the crack baby with significant brain damage and serious developmental disorders was an exaggeration. There have been some studies that have identified negative effects of cocaine on a developing fetus, but these effects are minor compared with the horrors that the media of the 1980s would have had people believe. Further, many of the studies are filled with methodological flaws that make it impossible to differentiate between the effects of cocaine and the effects of some other substance or behavior. Similarly, the nature of the participants of a study can affect the results of the study, a factor known as selection bias. Many of the studies of the effects of cocaine on the fetus involve women in drug treatment programs or women suspected of substance use by clinical staff (Zuckerman et al., 1995). It is likely that these women exhibited other behaviors (such as cigarette and alcohol use) that may have worsened (or even were the main contributors to) the identified problems with the fetus. Further, many of the studies of the effects of cocaine on the fetus were correlational. A correlational study examines two variables and notes a relationship between them. In other words, if we measure the amount of cocaine used across the population and the number of birth defects exhibited by infants in that population, we will likely find a positive correlation (as cocaine use rises, the number of defects rises as well). The problem is that such a study does not suggest a causal relationship between cocaine use and birth defects. It is likely that tobacco use is positively correlated with both birth anomalies and cocaine use; thus it could be tobacco that causes the anomalies, not cocaine. Finally, there are many factors that can cause the negative effects that have been attributed to cocaine use, including polydrug use, low socioeconomic status, chaotic social environment, poor nutrition, poor prenatal care, and an increased incidence of sexually transmitted diseases (STDs) (Holzman and Paneth, 1994; Zuckerman et al., 1995). A recent review of this literature has been provided in the monthly newsletter of the Illinois Teratogen Information Service (Simi et al., 1998). Cocaine studies focused on specific aspects of fetal function illustrate further what is known and not known in this area.

Putative Effects of Methamphetamine

Spontaneous abortion. Although there have been some studies that have suggested a correlational link between cocaine use and spontaneous abortion, a recent meta-analysis (meta-analysis is a mathematical method of adding the effects of many potentially contradictory studies in order to determine a consensus) suggests that this is only the case when polydrug use is confounded with cocaine use (Lutiger et al., 1991). This is evidence that use of multiple drugs, not just cocaine, is associated with spontaneous abortion.

Placental abruption. Placental abruption occurs when the placenta pulls away from the wall of the uterus before labor begins. As with spontaneous abortion it has been suggested that placental abruption is associated with cocaine use. However, as with spontaneous abortion, several studies have concluded that this condition co-occurs with polydrug use (Keith et al., 1989; MacGregor et al., 1989) but not with cocaine use (Holzman and Paneth, 1994). In fact, in a 1994 review of the literature, Holzman and Paneth suggest that placental abruption is more likely associated with alcohol and tobacco use than with cocaine use.

Pre-term delivery. Holzman and Paneth (1994) also suggest that pre-term delivery may be related to lifestyle rather than to cocaine use. However, they concede that low birth weight, microcephaly, and reduced fetal length have all been observed consistently in cocaine-exposed newborns.

Sudden infant death syndrome. It has also been suggested that cocaine exposure increases the occurrence of sudden infant death syndrome (SIDS). However, a recent meta-analysis found that the risk for SIDS was increased when cocaine-exposed infants were compared with non-drug-exposed controls, but not when compared with polydrug controls (Fares et al., 1997). Once again, the evidence points to a negative effect of polydrug use on the fetus, but not necessarily the use of cocaine on its own.

Behavioral effects in newborns. A pattern of withdrawal has been identified in neonates. This pattern includes tremulousness, irritability, abnormal sleep patterns, poor feeding, high-pitched cry, and muscle rigidity (Chasnoff, 1988). Further, it has been suggested that there is a dose-related risk for poor state regulation, attention, responsiveness, orientation, and motor/tone (Hurt et al., 1995; Richardson et al., 1996; Delany-Black et al., 1996; Eyler et al., 1998).

Structural brain abnormalities. While brain abnormalities have been observed in chronic users of cocaine, no structural brain abnormalities have been observed in those who were exposed prenatally (Behnke et al., 1998; Smith et. al., 2001). However, cocaine-exposed rabbit pups display an abnormal structural and neurochemical development of the anterior cingulate cortex, which persists into adulthood and may cause an attentional deficit (Romano and Harvey, 1998). The data from longitudinal studies on the

behavioral and neuroanatomical effects of prenatal cocaine exposure are too contradictory to draw any conclusions from them (Mott et al, 1994; Zuckerman et al., 1995; Landry and Whitney, 1996; Hurt et al., 1997; Loebstein and Koren, 1997).

Taken together, the above data suggest that while cocaine has some effect on the developing fetus, the extent of that effect is far less severe than we initially suspected. Further, due to numerous methodological flaws, it is impossible to differentiate the effects of cocaine from some other drug. In fact, the abnormalities listed above have all been associated with other, very common legal substances including tobacco, which is associated with low birth weight (Cnattingius et al., 1993), spontaneous abortion (Harlap and Shiono, 1980), placental abruption (Raymond and Mills, 1993), perinatal mortality (Werler, 1997), pre-term delivery (Shiono et al., 1986), SIDS (Haglund and Cnattingius, 1990), and deficits in cognitive development (Naeye and Peters, 1984).

What Is Known about the Effects of Methamphetamine on the Fetus

It seems that the lesson of the 1980s is not being applied to methamphetamine. Our knowledge about the effect of methamphetamine on the human fetus is limited. We know far less about the effects of methamphetamine on the developing fetus than we know about the effects of cocaine, alcohol, and tobacco. In fact, the National Institute of Drug Abuse (NIDA) was advertising in the *Journal of the American Medical Association* (*JAMA*) as late as 2000 for researchers who would be interested in examining the effect of methamphetamine on the fetus (Marwick, 2000) in hopes that they could head off the unfounded fears that we experienced with the cocaine scare of the 1980s. Most of what we do know comes from examining the effects of methamphetamine on mouse fetal tissue. This is a very difficult model to use to attempt the understand the human condition, because as discussed in Chapter 4 on MDMA (a compound chemically similar to methamphetamine) the effects of brain damage can proceed very differently in rodent models than in the human animal.

In the mouse, we know that methamphetamine can cross the placenta and affect the embryo (Won et al., 2001). However, we have not observed any anatomical damage resulting from this effect. We have observed changes in the levels of the neurotransmitters serotonin* (Won et al., 2002) and

* For the biochemist, reaggregates of mesencephalic-striatal projections prepared from methamphetamine-exposed embryos showed a significant elevation in serotonin levels at all culture ages compared with reaggregates prepared from saline-treated embryos. Levels of 5-HIAA in reaggregates and culture medium were also elevated in 14- and 29-day-old cultures derived from drug-exposed embryos.

dopamine* (Heller et al., 2001) in the rodent neonate, but the consequences of these chemical changes for the adult animal are unclear.

A recent review by Plessinger (1998) concluded that "based on findings in humans and the confirmation of prenatal exposures in animals, amphetamines and methamphetamines increase the risk of an adverse outcome when abused during pregnancy." Plessinger further concluded that clefting, cardiac anomalies, and fetal growth deficits have all been observed in studies of both humans and other animals. However, the effects of prenatal exposure to amphetamines on behavior in humans were confounded by both genetic and environmental factors, which included polydrug abuse. Thus, the study was unable to draw any conclusions about the effect of prenatal methamphetamine exposure on human behavior.

The policy of CPS in Hawaii County is that, if a newborn baby tests positive for methamphetamine exposure,** it will remove the child, and any siblings, from the mother's care. An exception may be made if there is another non-drug-using adult living with the mother who will agree to care for the infant. Hospitals around the island are not obligated to test mother or infant for methamphetamine exposure. Some do and some do not. Those who do not cite the need to assure that new mothers come to the hospital for both pre- and postnatal care (if expectant mothers know that they will be tested for drugs and could lose their children, then they may just decide not to use medical services) and the lack of evidence to support a damaging role of methamphetamine on a fetus.

Conclusion

We have reviewed several lines of evidence suggesting that the current trends that we are observing in court and CPS activity are in fact inconsistent with the present state of science. Science is an ever-changing institution. The scientist believes that when new data appear that discredit a theory then we must change the theory. The scientist is trained to change his or her beliefs very quickly. The courts and CPS, however, are not. The effect of cocaine on the developing fetus has always been a controversial issue. However, we now know that the damaging effects of cocaine on the fetus are far less severe than the damaging effects of tobacco. In regard to cocaine, we jumped the gun in assuming it was more damaging than it really was. Similarly, we do not know

* For the biochemist, dopamine levels were elevated in fetal corpus striatum and the rostral mesencephalon following maternal treatment with 40 mg/kg methamphetamine for 7 or 14 days.

** The standard method for testing a newborn for drugs is the meconium test. Meconium is the fetus's first fecal matter. The use of the test is questionable because one report suggests that it yields false positives 43% of the time (Moore et al., 1995).

if methamphetamine causes fetal damage. This uncertainty is of extreme importance because, in decisions regarding custody, the appeals courts have generally acted to protect the children — we have reviewed a body of literature that suggested that the courts have chosen to adopt the point of view that the health of a child is more important than incursion into the rights of mothers. However, if we do not know if methamphetamine is damaging to a fetus, is it appropriate to punish a mother for use of methamphetamine during pregnancy by removing her child from her care? The hypocrisy of both the court system and CPS is clear when we examine the effects of tobacco on the fetus. We do not remove children from the custody of parents because parents smoke tobacco products; even though, we know that tobacco causes severe damage to the developing fetus.

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