

LEGAL AND ETHICAL CONSIDERATIONS IN MECONIUM TESTING FOR FETAL EXPOSURE TO ALCOHOL

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ABSTRACT

In Canadian law, pregnant women are held to owe no enforceable duties of care to their children before birth, but healthcare providers may be held accountable once children are born alive for causing injuries prenatally. When children are born in hospitals, recovered meconium may be tested without consent, but there may be an ethical duty to inform mothers. Meconium belongs to the newborns, and mothers may be required to make decisions about its use in their children's best interests. Proposals to test meconium from particular populations raise concern about stigmatization.

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Duties of Care to Children Before Birth

Canadian law, reflecting its origins in English law, has long held that children can sue their parents, and that once born alive, they can sue whoever caused them injuries they suffer that were inflicted before their births. In July 1990, however, the Supreme Court of Canada refined the interaction of these two rules in the *Dobson* case¹, by holding that children cannot sue their own mothers for pre-natally caused injuries. In finding that pregnant women owe no legally enforceable duties of care to their children before birth, the judges adopted the reasoning of Justice McLachlin (as Chief Justice McLachlin then was) in an earlier Supreme Court decision², in which she noted the very real potential for any duty of care a pregnant woman might owe to her fetus to intrude unacceptably upon that woman's fundamental rights. The Court held that pregnant women should enjoy the same control over their activities as non-pregnant women, and men, including consumption of alcohol.

Third parties do owe legal duties of care when they foresee, or reasonably should foresee, that their actions regarding a pregnant woman are liable to cause injury to her fetus *in utero*. Accordingly, healthcare providers can be held liable when children born alive suffer injuries that, but for the negligence, assault or other wrong the providers committed while they were *in utero*, the children would not have suffered. For instance,

failure adequately to alert pregnant women to the harm they may cause to the fetuses they carry by their consumption of alcohol, and failure to advise the women of available resources to suspend or reduce their use of alcohol during pregnancy, may constitute legal negligence. This is particularly so when prenatal care indicates, or by professional standards should present an indication of, problem drinking harmful to fetuses later born alive. Further, if mothers can show that, on due warning, they would more likely than not have remedied their harmful consumption of alcohol, they may be entitled to recover compensation for the extra burdens they bear due to their children's preventable impairments.

Meconium Testing

When meconium becomes available to healthcare providers such as nurses when babies are delivered in hospitals, it may legally be tested without the mothers' consent. When a young man under police questioning refused to provide a DNA sample, for instance, on his lawyer's advice, he cleared his nose on a tissue in the police station washroom and threw the tissue into a waste bin. The police recovered it, and, without his consent, conducted a DNA test on the mucous it contained. The Supreme Court of Canada held this evidence admissible, since the man had in effect abandoned the sample, and the police were entitled to acquire access to it.³ Similarly, hospital personnel are

legally entitled to recover and test a newborn's meconium without consent, when it becomes available in the routine course of care.

This is done for health purposes, of course, not to obtain evidence for police purposes. Gathering forensic evidence raises issues under the Canadian Charter of Rights and Freedoms, particularly under section 7 regarding privacy or security of the person, and section 8 regarding search for and seizure of evidence. Even in the health setting, however, legal concerns arise when results of meconium testing are obtained for clinical purposes and entered on a child's medical record, which has implications for its mother's use of alcohol while pregnant. The "holder" of this information, contained in the newborn's medical record and perhaps the mother's, is required to comply with provincial or territorial privacy legislation, such as Ontario's Personal Health Information Protection Act 2004, or, if no such legislation exists, the federal Personal Information Protection and Electronic Documents Act.⁴

The fact that meconium may lawfully be tested without a mother's consent raises the issue of whether it is ethical to employ a power allowed by law (since not everything that is legal is ethical), and whether mothers should at least be informed that this test will be conducted. Where it is conducted for anonymous prevalence studies, no disclosure may be required, because the test result is not relevant to the individual child's care. If testing is undertaken to provide clinical evidence of children's prenatal exposure to alcohol, however, some neonatal facilities not seeking consent do inform mothers that their newborns' meconium will be tested. They may also respect mothers who say that they object to such a test, by not conducting it. This is legally questionable, however, if the tests are proposed for the particular children's care, since parents are legally required to provide or consent to medical services, including tests, that are in their children's interests.

Surrender of Meconium

If meconium testing is clinically indicated in the interests of a particular child born, for instance, at home, the issue arises of healthcare providers' access to it. This involves the question of who controls or owns the meconium, a question that perhaps only lawyers find interesting. Although

dead bodies and, since the legal abolition of slavery, living bodies, are not considered in law to be "property", the issue arises of whether bodily wastes or separated tissues can be considered to be property. Property law governs the relationship between persons and objects or things, and property status is usually attributed to objects or items that have value. Value is often a result of utility or reverence, such as for religious relics or due to association with celebrity. This includes abstract items such as ideas or tunes, which may constitute "intellectual property." Dead bodies have not been treated as property because, historically, they had no use. However, human tissues or even waste products may now have utility, such as for study, transplantation or forensic use, and are increasingly legally considered to be property.⁵ For instance, a man who gave police authorities a urine sample when suspected of impaired driving, but poured it away when the police were distracted, was convicted on the basis of theft of what had become police property.⁶

Meconium testing for alcohol by measuring fatty acid ethyl esters (FAEE) has been liable to produce false positive and negative results, leaving its value open to some uncertainty.⁷ If it is now considered to provide a valuable neonatal screening means, however, the material has value and may accordingly be considered in law to constitute property. This raises questions about to whom it belongs, and the rights and duties of those, particularly mothers tending their newborns, who exercise control over it.

If meconium is treated as legal property, it is the child's, not its mother's. She possesses it not as an owner, but as a trustee. She must accordingly manage it in the child's best interests. If the meconium is not requested for testing, the child's interests will be served, of course, by prompt sanitary disposal of the material. If a sample is requested by a healthcare provider for clinical use directed to the particular child's care, however, the mother may not legally be free to refuse, since she is required to provide or consent to services to aid her child's health assessment and care.

Nevertheless, where the child's best interests lie may be contentious, since such interests may be seen from a short or longer focus. The short focus concerns the child's more immediate care, as a newborn actually or potentially affected by fetal

alcohol spectrum disorder (FASD), but the longer focus concerns being reared in a relatively stable home, by its mother. If the mother retains a habit of problematic addiction, to alcohol or other substances, evidence from or derived from meconium testing may lead to different forms of legal and social intervention.

The newborn's positive meconium test results may be liable to subpoena in legal proceedings, unless the test was conducted anonymously, without individual identification. Even if the test result identifies the newborn and therefore the mother, however, the medical record does not have to be given simply because it is requested under subpoena. A subpoena cannot be ignored, but it can be judicially challenged, perhaps with support of the Canadian Medical Protective Association. Grounds of challenge may be that test results are inconclusive, due for instance to high false-positive rates, that a screening test is not a diagnosis, or on grounds of confidentiality, and that the requesting party does not really need the result to pursue its legal claim. If the judge rules that the medical information must be provided, there is no legal alternative to compliance.

Legal proceedings seeking disclosure of a test result could be for child protection, initiated by a governmental child protection agency or a quasi-public agency such as a Children's Aid Society, for child custody in a matrimonial dispute, or for prosecution and/or criminal sentencing, such as for criminal negligence causing bodily harm, for instance to the newborn child. The burden of proof in the last is proof by the prosecution beyond reasonable doubt, and the current state of the art of clinical meconium testing may leave a reasonable doubt about its reliability in an individual case. Non-criminal (that is, civil) proceedings may require proof on a more-likely-than-not (balance of probability) basis. Since the criminal standard may be too demanding to protect a child at risk, but the latter, 51 per cent, standard may be too low to justify severance of parental ties, courts may apply an intermediate standard, often described as clear and convincing evidence.

The Significance of Testing

Testing anonymous samples to assess prevalence of alcohol use among pregnant women in

particular populations does not raise the privacy and subpoena issues that may occur in individual cases, but raises no less sensitive issues of how the target populations are selected. There is a risk of negatively stereotyping population groups by racial, ethnic or comparable profiling. This is an issue that particularly concerns Canadian aboriginal populations, whether living on or off reserves.

An approach to overcome any stigmatizing selection of target populations is to support universal testing of meconium samples. This raises ethical concerns of cost-effectiveness in allocation of scarce resources, in not distinguishing between apparently high-risk and low-risk populations, and of whether aboriginal populations would find this acceptable. Meconium is not a tissue, but may be regarded as analogous. The guidelines that the Canadian Institutes of Health Research (CIHR) drew up in consultation with aboriginal populations for research involving such populations are now incorporated in the second (2011) edition of the Tri-Council Policy Statement on research with humans. These provide that aboriginal communities may not be willing to surrender tissues, but may selectively make them available for research by loan, for subsequent return. Communities' and individuals' rights are protected under section 25 of the Charter of Rights and Freedoms, which secures "any aboriginal treaty or other rights or freedoms that pertain to the aboriginal peoples of Canada." If aboriginal populations apply this to waste material, such as meconium, universal testing may be compromised.

If meconium testing progresses to come closer to a clinical diagnosis, and if newborns who test positive for FAS or FASD can receive timely treatment that will relieve or mitigate the longer-term effects of their conditions, meconium testing of newborns where feasible, such as in hospital deliveries, may contribute to the standard of care legally expected in routine neonatal management, comparable to PKU testing. Failure to undertake it may found legal claims by or on behalf of children for physician and/or hospital negligence⁸, and possibly found comparable claims by parents. However, mothers' entitlements may be reduced by their own contributory negligence in disregarding warnings and consuming alcohol inappropriately while pregnant.

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