*COMMITTEE REPORT*

# Ethical considerations of reproductive technologies*

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**The custody battle** in the state of New Jersey over "Baby M" generated nationwide debate on the ethical, moral, and legal aspects of surrogate motherhood. This is an arrangement whereby a woman agrees to be artificially inseminated and then to give up for adoption the child thus conceived to the biological father and his wife, whose infertility is generally the reason for the couple's seeking other means of obtaining a child. An attorney attends to the legal phases of the transaction, and draws up a contract between the adoptive parents and the surrogate mother to compensate the latter for the costs of her medical care, her living expenses, and any discomfort or inconvenience occasioned by the pregnancy.

The biological father in the "Baby M" case was William Stern, whose wife, Elizabeth, a pediatrician, had been advised against becoming pregnant to avoid exacerbating her mild case of multiple sclerosis. Mary Beth Whitehead agreed to a payment of $10,000 plus medical expenses to bear the baby for the Sterns, and was artificially inseminated with William Stern's sperm. After the child was born, however, Whitehead decided she wanted to keep the baby, and fled with her to Florida. She was finally found and returned to New Jersey where the battle for custody was fought in the courts.

Currently, no state has a law expressly forbidding or endorsing surrogate parenthood, although several states, including California and New York, are considering legislation to regulate this practice and to protect the best interests of all concerned parties, including the baby.

Artificial insemination of women has been successfully practiced for nearly a century to enable otherwise infertile couples to have children. Different legal, moral, ethical, and social questions are posed by the use of donor sperm versus the husband's sperm. Some of these questions are discussed below.

In 1978, Louise Brown, the world's first "test tube" baby, was born as a result of in vitro fertilization, the process of mixing an egg with some sperm in a petri dish to achieve fertilization, then transferring the early embryo to a woman's uterus with the hope that it would successfully implant and lead to the birth of a healthy child. In the case of Louise Brown, the sperm and egg used were those of Mr and Mrs Brown. Since 1978, there have been several hundred thousand births resulting from this technique. Often the embryo is implanted into the uterus of a woman other than the egg donor; the sperm utilized may also be obtained from a man other than the husband of the egg donor or the woman into whom the embryo is implanted. This technique is characterized by some as science at its best and by others as immoral meddling. Other possibilities suggested by this technology include the freezing and storage of eggs and embryos, the donation or sale of gametes or embryos, early gender selection, early diagnosis of genetic or chromosomal abnormalities, and embryo research.

Some of the many legal, moral, ethical, and social questions involved in these procedures of reproductive technology are the following:

*Artificial insemination*

Who is responsible if a defective child is born?

Should all sperm donors be screened for genetic defects?

What is the donor's responsibility for (knowingly?) giving defective sperm?

Should sperm from a donor with acquired immunodeficiency syndrome be automatically rejected?

Is the physician guilty of perjury when he or she signs the birth certificate knowing that the biological father is not the one named on the birth certificate?

Is the child considered legitimate?

What are the child's rights concerning inheritance, support, and custody?

Can the child sue for the donor's estate?

Can the mother sue the donor for support of the child?

Can the donor sue for custody of the child?

What is the donor's responsibility concerning the provision of support for his offspring?

Should the husband legally adopt the child when his wife gives birth?

How do adoption laws apply here, or do they apply at all?

*Surrogate motherhood*

What if the adoptive parents die or are divorced before the birth of the child, or decide they do not want the baby after all?

What if the child is born defective?

Is it proper for surrogates to have children to be turned over to single people, or to homosexual couples?

What if the surrogate mother decides to have an abortion or wishes to keep the baby?

If a surrogate mother receives a fee, is she in effect selling her baby?

Should the surrogate be married or single, have other children, or have no children?

Should the adoptive parents (including the biological father) meet the surrogate?

Should the child know about the surrogate arrangement when he or she grows up?

Is monetary compensation the real issue?

What kind of counseling should be done with all parties, and what records should be kept?

One underlying theme in considering these legal issues and moral dilemmas is the motivation behind the actions of the concerned parties. On one extreme are those sperm donors and surrogate mothers who are motivated purely by a desire for monetary gain. On the other are those couples that have been trying unsuccessfully for years to have a child and finally resort to one of these methods. Their motivation is pure and represents their burning desire to have a child. Many ethical and moral conflicts arise because the motivation of one party (the sperm donor or surrogate mother) is different from the motivation of the other (the husband and wife). Few ethical concerns are posed by the case of the husband and wife who resort to in vitro fertilization using their own egg and sperm, or that of the young woman with Hodgkin disease or other cancer, who cryopreserves her eggs for later use in having children with her own spouse. Such cases pose very few moral dilemmas other than those of the propriety or religious permissibility of artificial insemination and in vitro fertilization. The religious and theological questions pertaining to these reproductive technologies are numerous and are important to physicians of various religious backgrounds and practices, but these are beyond the scope of this paper.

## THE WARNOCK COMMITTEE OF INQUIRY INTO HUMAN FERTILIZATION AND EMBRYOLOGY

In 1983, the British Parliament asked Dame Mary Warnock to chair a blue-ribbon commission to explore the ethical implications of advances in the treatment of human infertility. The Warnock report[1] was completed in 1984 and the recommendations were published and editorially and legally commented upon in *The Lancet*.[2-4] The report was optimistic in tone and sympathetic to the desires of infertile people. It stated that sperm and egg donations and in vitro fertilization are acceptable techniques for the treatment of infertility. It recommended that the effects of freezing of embryos continue to be explored, although it warned that frozen embryos should not be transplanted until it has been established that no unacceptable risk of abnormality is involved.

The Warnock committee also recommended strict legal controls on the provision of infertility services, on research on human embryos, and on surrogacy arrangements. Under its guidelines, a statutory licensing authority would be set up to regulate and monitor infertility services and research. All practitioners who use human gametes or embryos for clinical or research purposes would have to be licensed, as would the premises in which they work. Legal controls would apply to the collection of sperm, the storage of frozen eggs, and the treatment of infertile patients.

The committee took a pragmatic view of surrogate motherhood, based heavily on the fear of commercial exploitation, or "womb-leasing." A limited, non-profit-making surrogacy service, subject to licensing and inspection, was considered by the committee but condemned by the majority since it was felt it would encourage the growth of surrogacy. The majority also recommended that legislation be enacted to make surrogacy a criminal offense and that surrogacy contracts be considered illegal and unenforceable.[1]

On the other hand, the committee recommended that a child born following artificial insemination with donor semen should be recognized as legitimate and that the semen donor and the child should be considered as having no parental relationship.[1] The committee's position on who should have access to artificial insemination with donor sperm or to in vitro fertilization was rather liberal, but the committee also suggested that no more than ten children should be fathered by a single donor. With some reservations, the committee approved the use of stored human embryos as a treatment for infertility and advised that the child born by means of embryo donation should be recognized as the product of the nurturing, rather than the genetic, parents. The committee also suggested that no unimplanted human embryo be allowed to develop past the 14th day after fertilization. The committee was sharply divided on the issue of the legal status of the embryos and under what circumstances and rules research might be performed upon them.

In response to both the Warnock committee report and the hostile and disapproving mood of the British public towards commercial surrogacy, the British government passed the Surrogacy Arrangements Act of 1985 which makes it a criminal offense to benefit from commercial surrogacy.[5] Voluntary surrogacy, however, is still within the law.

## THE AMERICAN MEDICAL ASSOCIATION'S JUDICIAL COUNCIL

Reports and opinions of the Judicial Council of the American Medical Association (AMA) on artificial insemination by donor, in vitro fertilization, and surrogate parenting were published in 1984 and 1985.[6,7] In 1986, the AMA House of Delegates adopted the reports containing the opinions of the AMA's Council on Ethical and Judicial Affairs on surrogate parenting, artificial insemination, embryo research, and fetal research.

In regard to surrogate motherhood, the council ex-

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pressed concern about

> . . . the ethical, social and legal problems that may arise in an arrangement in which a woman agrees to become pregnant through artificial insemination, to carry to term and to give the child thus conceived to other persons to serve as adoptive parents. The welfare of the child should be a foremost consideration. In ordinary adoption proceedings an appropriate agency usually investigates prospective adoptive parents to determine their fitness as parents. This precaution is not always present in surrogate motherhood arrangements.

The Judicial Council was also concerned that, if there were a subsequent birth of a defective child, the prospective adoptive parents and the woman who gave birth to the child might not want to or would be unable to assume the responsibilities of parenthood. Many other ethical, social, and morally difficult situations were envisioned by the council. For example, the woman who has contracted to bear the child may decide to have an abortion or to refuse to give the child up for adoption. Another consideration which may be overlooked is the psychological impairment that may occur in a woman who deliberately conceives with the intention of bearing a child which she will give up. Therefore, the Judicial Council concluded that surrogate motherhood presents many ethical, legal, psychological, societal, and financial concerns and does not represent a satisfactory reproductive alternative for people who wish to become parents.

In regard to artificial insemination, the council advised that physicians should obtain the informed consent of both women seeking artificial insemination and their husbands. They should also inform them that children conceived through the process have all the rights of naturally conceived children. Physicians were urged to use the best available scientific techniques to screen semen donors for genetic defects, inheritable and infectious diseases, and other disorders that may affect fetuses. It was recommended that parents and children not be informed of the identity of donors. Physicians were also advised to avoid the frequent use of semen from the same donors.

The council commented that the technique of in vitro fertilization, combined with embryo transplantation, helps certain previously infertile couples to bear children, and that it is useful also in research aimed at understanding how genetic defects arise and are transmitted and how they might be prevented or treated.

Finally, in regard to embryo and fetal research, the council stated that all fertilized eggs that have the potential for human life and that will be implanted into the uteruses of women should not be subjected to laboratory research. All fertilized ova not used for implantation and that are maintained for research purposes should be handled with the strictest adherence to the Principles of Medical Ethics, the council's guidelines for research and medical practice contained in its fetal research opinion, and the highest standards of medical practice.

## Statement of the Ethics Committee of the American College of Obstetricians and Gynecologists

In 1984, the American College of Obstetricians and Gynecologists (ACOG) published a rather technical statement on in vitro fertilization, detailing the procedure involved, as well as some of its risks and benefits.[8] One short paragraph was devoted to "ethical considerations" which acknowledged that the procedure raised "many questions of ethical importance," and promised that ACOG would discuss some of these issues "in the near future."

On September 1, 1986, the ACOG released a statement prepared by its Committee on Ethics, addressing such issues as frozen embryos, donating or selling embryos, embryo research, gender selection, and insurance coverage.[9] The statement began by pointing out the support by a broad social consensus of the simplest case in which the gametes are provided by husband and wife and the pregnancy, if successfully initiated by in vitro fertilization and embryo placement, is carried by the wife. Ethical questions remain concerning the optimum number of eggs to be fertilized, the optimum number of embryos to be placed during one cycle, and the use or disposition of surplus embryos. Among the alternatives available are the freezing of embryos, the donation of embryos to another couple, donation of embryos for research, or the discarding of surplus embryos. The ACOG statement recommended that these options be discussed in advance with the gamete providers.

Regarding the use of artificial insemination or in vitro fertilization with embryo placement for single individuals, the ACOG statement suggested that physicians should handle requests from single persons within an overall policy regarding the screening of candidates for infertility services. The primary consideration should be the probable welfare of the resulting child. The statement also voiced concern about the quality standards of centers and practitioners offering these reproductive services.

The ACOG statement asserted that

> . . . embryo freezing raises almost unprecedented metaphysical, ethical, and legal problems. The metaphysical problem is what status to ascribe to an embryo that can be maintained for years, perhaps even decades, in a state of suspended development. The ethical and legal problem to be resolved is whether frozen embryos should be regarded, in some sense, as the responsibility of their progenitors. It is recommended that, when embryos are to be frozen, couples should be required to declare their wishes in advance, in writing, concerning the disposition of the embryos in the event of the death of a spouse or both members of a couple, the wife's incapacitation, or the dissolution of the marriage. For practical reasons, centers should also set policies on time limits for maintaining early embryos in a frozen state.

Artificial insemination by donor is considered ethically acceptable if the husband carries a serious genetic defect or if he cannot fertilize the eggs of his wife. In similar cases, egg donation would also seem to be ethically acceptable, although egg retrieval entails greater risk to the donor than does semen donation. The receipt of a donated embryo, according to the ACOG statement, "is analogous to adoption in the sense that neither adopting parent contributes genetically to the offspring" but the recipient couple has the advantage of experiencing the pregnancy and the delivery. Any donation program should include careful screening of donors for infectious diseases and genetic problems. Careful records should be kept and organized in a two-tiered system that protects the privacy of donors yet allows access to relevant medical information.



The sale of gametes is a serious ethical choice for our society. Commercial sperm banks already exist in the United States, and when the cryopreservation of eggs becomes technically feasible, such banks will probably also want to provide human eggs for a fee. The ACOG statement affirmed that a nonprofit system for gamete collection and distribution would be ethically preferable to the current system, in part because it would reduce the incentive for gamete donors to withhold vital medical information. Preimplantation gender selection to help couples avoid sex-linked genetic disorders is viewed by the ACOG as "ethically justifiable."

With regard to laboratory research on early human embryos, the ACOG statement took an intermediate view on the moral status of the human embryo.

> Our moral obligations to early human embryos [less than 15 days] may be outweighed by the duty to develop new and better methods for providing care to pregnant women, infertile couples, early embryos, and future children . . . In light of this conclusion, it is recommended that laboratory research with early human embryos proceed, guided by ethical standards and subject to prior review.

## Ethics Committee Report of the American Fertility Society

One week after the ACOG released its statement on ethical issues related to in vitro fertilization and embryo placement and research, the American Fertility Society's Ethics Committee (AFSEC) published its report.[10] The report identified four major issues relating to the new reproductive technology: the degree of artificiality of the new reproductive technology, the moral status of the human preembryo, the role of the family or genetic lineage, and the appropriate role of government.

The AFSEC considers the following procedures ethically acceptable: the use of artificial insemination with husband's sperm for demonstrated medical indication; the use of artificial insemination with donor sperm; basic in vitro fertilization involving the use of donor sperm, donor eggs, and donor preembryos; the cryopreservation of sperm; and research on the preembryo.

The AFSEC considers the following as clinical experiments, the general application of which is premature: uterine lavage for preembryo transfer, the cryopreservation of unfertilized eggs, fertilized eggs, and preembryos; and surrogate motherhood. The AFSEC opposes the use of surrogate gestational mothers for nonmedical reasons but believes that there may be medical reasons to justify individual decisions. There are no adequate reasons, continues the AFSEC statement, to recommend legal prohibition of surrogate motherhood. Nevertheless, the AFSEC had serious ethical reservations about surrogacy and recommended that if it is pursued, it should be done as a clinical experiment but without general application of the procedure until more data is available about its risks and virtues.

Finally, the report expressed concern about quality assurance in the use of reproductive technologies and suggested that the American Fertility Society, in conjunction with other public and professional groups, take the initiative "in stimulating active training, in reviewing standards, in providing information, and in encouraging professional and public oversight of ongoing reproductive technologies." Several appendices to the report describe a minimal genetic screen for gamete donors, provide new guidelines for the use of semen for donor insemination, and cite minimal standards for programs of in vitro fertilization.

## Comment

Artificial insemination, in vitro fertilization, surrogate motherhood, and cryopreservation of sperm, eggs, or fertilized zygotes for later use are strongly opposed by some people on moral and ethical grounds, and just as strongly justified by others. Human procreation should not be converted into the "manufacture" of progeny. The intimate love joining husband and wife together should not be broken by the "biologization" of family life.

On the other hand, if infertility is considered to be an illness, either physiological or emotional or both, the physician's duty and mandate is to heal illness and to overcome, if possible, both somatic and emotional strains related to that illness. To help a couple to have their own child through the modern technologies of artificial insemination or in vitro fertilization seems to be within the physician's purview and might even strengthen the bonds of the marriage and the family structure. The use of host or surrogate mothers for the convenience of couples able to conceive by normal coitus cannot be condoned. However, an infertile couple may have recourse to the new reproductive technologies including the use of a surrogate mother, in the absence of alternatives, in order to effect pregnancy and by so doing preserve their marriage and bring themselves happiness.

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