January 1990

Fetal Tissue Research and Abortion: Do They Have a Future Together?

Angela M. Skerrett

Follow this and additional works at: http://scholarship.law.campbell.edu/clr

Part of the Health Law and Policy Commons, and the Law and Gender Commons

Recommended Citation


This Comment is brought to you for free and open access by Scholarly Repository @ Campbell University School of Law. It has been accepted for inclusion in Campbell Law Review by an authorized administrator of Scholarly Repository @ Campbell University School of Law.
FETAL TISSUE RESEARCH AND ABORTION: DO THEY HAVE A FUTURE TOGETHER?

INTRODUCTION

The year is 2001. Fetal Factory No. 998-59 has just received its latest shipment of tissue from Nicaragua, the location of the newest fetal-farm-for-money establishment. The frozen fetal tissue will be cloned and cultured into massive tissue cultures. From here, the tissue will be transported to Tissue Bank No. 653-4. Today, Transplant Team No. 312-1 is coming to withdraw three ounces of brain tissue, gestated for ten to fourteen weeks. The team will inject the brain tissue into the brain of an anonymous adult, suffering with soon-to-be-extinct Parkinson's disease. The fetal tissue cells will graft to the adult tissue and produce dopamine, the chemical lacking in Parkinson’s patients. To-

1. House member, John J. LaFalce, of New York, stated in the first session of the 101st Congress that with the eight to ten million “sufferers of chronic or degenerative diseases, demand [for fetal tissue] will soon outstrip supply. This can only lead to...exploitation of poor and Third World women as fetal-organ farms....” 135 CONG. REC. E4066, E4067, (daily ed. Nov. 21, 1989) (statement of John J. LaFalce)(quoting Nathanson, Using Fetal Tissue Will Cost Unborn Lives, USA Today, Nov. 3, 1989).

2. By cloning fetal tissue cells, one company can produce “enough cells from one fetal pancreas to treat 20 adult diabetics.” The company is aiming for a production capacity of enough fetal pancreatic tissue to treat 15,000 diabetic patients per year by 1991. The cost of each treatment will be $5,000. Note, Fetal Tissue Transplants: Restricting Recipient Designation, 39 HASTINGS L.J. 1079, 1085 (1988) (quoting Maugh, Use of Fetal Tissue Stirs Hot Debate, L.A. Times, Apr. 16, 1988 at 28, col. 4.)


4. “Parkinson's disease may be the first human disease to be treated successfully through transplantation of fetal brain tissue....” Id. at 291.

5. “Numerous reports spanning more than 100 years have established that fetal brain-tissue grafts to host brain survive and may connect with the host brain.” Hoffer, Granholm, Stevens and Olson, Catecholamine-Containing Grafts in Parkinsonism: Past and Present. 36 CLINICAL RESEARCH 189, 189 (1988).

6. In rat experimentation, “the histochemically detectable reinnervation of host striatum by graft-derived dopamine nerve terminals release[d] transmitter
morrow, the team is coming for three ounces of fetal pancreatic tissue, gestated for nine weeks. The recipient suffers from diabetes. After receiving the injection of fetal pancreatic tissue, the recipient will be able to lead a normal life. Is this scenario an accurate prediction?

The use of fetal tissue to treat diseases such as Parkinson's disease and diabetes is in an experimental and very unsettled state. Although scientists are making progress in fetal tissue experimentation, they are finding themselves confronted with ethicists claiming that the use of fetal tissues for transplantation is morally wrong. The thought of injecting electively aborted fetuses into the brain of another human being is troublesome to them. Societal attitudes towards abortion seem to determine societal attitudes towards fetal tissue research. This Comment will examine fetal tissue research as it relates to the issue of abortion. First, the Comment discusses the current status of fetal tissue research. Second, the Comment looks at the influence of abortion on fetal tissue research, including constitutional and ethical issues. Third, the Comment examines the future of fetal tissue research. Finally, this Comment will conclude that the attitudes, opinions and laws concerning abortion will play a major role in determining the future of fetal tissue research.

Fetal Tissue Research—Its Current Status

Fetal tissue research has not always been as controversial as it is today. Scientists began experimenting with fetal tissue in the 1930's. Fetal tissue was used to develop the polio vaccine. The use of fetal cell lines to produce vaccinations was a generally accepted practice. Public opposition to the use of fetal tissue in medical research was minimal until the early 1970's when abortion...
was legalized.\textsuperscript{11} Having failed in the Supreme Court’s \textit{Roe v. Wade}\textsuperscript{12} decision, right-to-lifers feared that because abortions were now legal, science would exploit the aborted fetuses by subjecting them to inhumane experimentation.\textsuperscript{13} The conflict between those opposed to abortion and researchers continued to build.\textsuperscript{14} The conflict exploded with the development of new uses for fetal tissue, namely transplantations.\textsuperscript{15} Injecting electively aborted fetal tissue into the brain of another human being posed many questions which have yet to be answered.

The government stepped into the picture by stopping federal fetal tissue research.\textsuperscript{16} In 1988, the Assistant Secretary of Health and Human Services, Dr. Robert Windom, issued a moratorium on the use of public funds for any fetal tissue research.\textsuperscript{17} The moratorium was to be in effect until the fetal tissue research issue could be examined further.\textsuperscript{18} In response to the moratorium, the National Institute of Health (NIH) appointed a special committee, composed of doctors, lawyers, theologians, and ethicists to investigate fetal tissue research.\textsuperscript{19} Assistant Secretary Windom presented the committee with eleven questions regarding the ethical and public policy problems with fetal tissue research.\textsuperscript{20} After extensive deliberation, the committee sent the director of NIH, James B. Wyngaarden, a proposal for government regulation of fetal tissue

\begin{itemize}
  \item \textsuperscript{11} Gold and Lehrman, \textit{Fetal Research Under Fire: The Influence of Abortion Politics}, 21 \textit{FAM. PLANN. PERSPECT.} 6, 7 (1989)(Fetal tissue has been used as a weapon in the war against abortion since 1973.)[hereinafter Gold].
  \item \textsuperscript{12} Roe \textit{v. Wade}, 410 U.S. 113 (1973).
  \item \textsuperscript{13} Gold, supra note 11, at 7.
  \item \textsuperscript{14} Id.
  \item \textsuperscript{15} Id.
  \item \textsuperscript{16} Culliton, \textit{Panel Backs Fetal Tissue Research}, 242 \textit{SCIENCE} 1625 (1988). \textit{See also}, Hellerstein, \textit{Fetal Research and Fetal-tissue Research: Policy Debate But No Resolution}, 2 \textit{F.A.S.E.B.J.} 3041, 3042 (1988) (In 1987, the National Institute of Health funded about $11.2 million of nontherapeutic fetal tissue research, less than 0.2% of its overall budget.).
  \item \textsuperscript{17} Id.
  \item \textsuperscript{18} Id.
  \item \textsuperscript{19} Culliton, \textit{Fetal Research Morally Acceptable}, 241 \textit{SCIENCE} 1593 (1988). \textit{See also}, Marwick, \textit{Fetal Tissue Study Panel Nears Conclusion}, 260 \textit{J.A.M.A.} 3108, 3109 (1988) (When asked by Assistant Secretary Windom whether an induced abortion is of moral relevance to the decision to use the tissue for fetal tissue research, the panel responded it was.).
  \item \textsuperscript{20} To view the eleven questions, see Nadler, \textit{Fetal Tissue Transplantation}, 143 \textit{A.J.D.C.} 149 (1989).
\end{itemize}
research.\textsuperscript{21} The proposal recommended removing the moratorium.\textsuperscript{22} The NIH unanimously approved the proposal and delivered it to the Department of Health and Human Services (DHHS).\textsuperscript{23} The DHHS rejected the NIH proposal and extended the moratorium indefinitely.\textsuperscript{24} The current status of fetal tissue research is therefore very uncertain.

A. Current Usage

Fetal transplantation experiments are underway for the treatment of many diseases including sickle cell anemia, leukemia, Huntington's chorea, cancer, and AIDS.\textsuperscript{25} Fetal tissue is being used because it possesses three unique properties: (1) fetal tissue grows rapidly (2) it is immunologically naive, and (3) it is very adaptable to a changed environment.\textsuperscript{26} The most publicized experimental use of the tissue is in treatment of Parkinson's disease. In 1988, Swedish researchers implanted ventral mesenphalic brain tissue from four eight to ten week old fetuses into the brains of two women suffering from acute Parkinson's disease.\textsuperscript{27} The scientists reported some small improvements in the motor functions of the women.\textsuperscript{28}

\textsuperscript{21} Culliton, supra note 16, at 1625. See also Annas and Elias, The Politics of Transplantation of Human Fetal Tissue, 320 NEW ENG. J. MED. 1079, 1080 (1989)(The panel concluded that the use of fetal tissue in research was acceptable public policy because "abortion is legal . . . and the research in question is intended to achieve significant goals.") [hereinafter Annas].

\textsuperscript{22} Marwick, Ban to Be Lifted on Research Use of Fetal Tissue?, 261 J.A.M.A. 342 (1989). Panelists agreed on keeping the decision, timing, and conduct of the abortion itself separate from the decision to provide any fetal tissue for research. Proper and informed consent to use the fetal tissues must be obtained from the pregnant woman, and the panelists have recommended steps to prevent the commercialization of the tissues or the exploitation of the woman undergoing an abortion. They also recommended that women donating fetal tissue for research and clinical studies not be permitted to designate those to whom these tissues should be given. Marwick, Fetal Tissue Study Panel Nears Conclusion, 260 J.A.M.A. 3108, 3109 (1988).

\textsuperscript{23} Id.

\textsuperscript{24} See infra note 217.

\textsuperscript{25} Gold, supra note 11, at 7.

\textsuperscript{26} Greely, supra note 8, at 1093.

\textsuperscript{27} Lindvall, Gustavii, Astst, Lindholm, Rehncrona, Beandin, Widner, Bjorkluno, Leenders, Rothwell, Johnels, Steg, Frackowiak, Marsden, Freedman, Hoffer, Seiger, Stromberg, Bygdeman and Olsen, Fetal Dopamine-Rich Mesenphalic Grafts in Parkinson's Disease, 2 LANCET 1483 (1988)[hereinafter Lindvall].

\textsuperscript{28} Id.
They concluded that "ventral mesencephalic tissue obtained at elective abortions can be implanted into brains of immunosuppressed Parkinsonian patients without major complications." However, no improvements of therapeutic value to the patients have been observed up to 6 months postoperatively. Currently in the United State, fetal neural tissue transplantation has been successful in lessening symptoms in chemically induced Parkinson's disease in primates. Although favorable, these experiments have produced no results of therapeutic value. Scientists must therefore conduct much more research before determining whether treatment of Parkinson's disease with fetal tissue is feasible.

B. Current Federal Regulation

In 1975, the U.S. Department of Health, Education, and Welfare (now the Department of Health and Human Services, hereinafter DHHS) adopted a set of regulations on fetal research which apply to federally funded research on living fetuses. The regulations apply whether the fetus is viable or not. The regulations apply to "research, developments, and related activities involving . . . the fetus." The regulations require that any research activities must meet the health needs of the mother or the fetus. The regulations require that the risk to the fetus be minimal and that the risk be the least possible for achieving the goals of the activity. "Minimal risk requires that the anticipated risks of the research be no greater than those risks encountered in daily life or in routine medical examinations." In addition, the method used to abort the

29. Id.
30. Id. The doctors reported that "[i]n patient 1 there has been a small but significant bilateral improvement of arm-hand function tests and foot lifting, beginning at about 3 months after transplantation. The improvement has been more marked contralateral to the implanted side. The motor performance of patient 2 has been more variable, but at 6 months she is performing the tests significantly more rapidly on both sides, with no obvious side difference. Id. at 1483.
32. Greely, supra note 8, at 1093.
33. Id.
34. 45 C.F.R. §§ 46.201-46.211 (1989).
38. Id.
fetus cannot pose any additional risk to the fetus or the mother in the interest of research.\textsuperscript{40}

The DHHS regulations govern the activities towards fetuses, \textit{ex utero}.\textsuperscript{41} Before any activity covered in the regulations may be undertaken, the researcher must determine whether or not the fetus is viable.\textsuperscript{42} If the fetus is nonviable, the vital functions of the fetus may not be artificially maintained.\textsuperscript{43} Activities which end the heartbeat or respirations of the fetus are prohibited.\textsuperscript{44} Also, the purpose of the activity must be the development of important biomedical knowledge which cannot be obtained by any other means.\textsuperscript{45} The regulations further require that both the mother and father consent to any research conducted on the fetus.\textsuperscript{46}

In 1985, Congress passed The Health Research Extension Act.\textsuperscript{47} This Act imposed further restrictions on fetal tissue research.\textsuperscript{48} The Act prohibits the Secretary of Health from supporting any research involving living fetuses for whom the viability has not been determined.\textsuperscript{49} The Act makes an exception to the rule if the research is therapeutic to the fetus or will provide valuable biomedical knowledge that cannot be obtained in any other way.\textsuperscript{50} The Act further requires that “the risk standard . . . be the same for fetuses which are intended to be aborted and fetuses which are intended to be carried to term.”\textsuperscript{51}

\textsuperscript{40} 45 C.F.R. § 46.206(a)(4) (1989).
\textsuperscript{41} 45 C.F.R. § 46.209 (1989).
\textsuperscript{42} 45 C.F.R. § 46.209(a) (1989). It is important to understand the difference between a viable, a nonviable, and a dead fetus. A viable fetus is one that is “able, after either spontaneous or induced delivery, to survive (given the benefit of available medical therapy) to the point of independently maintaining heartbeat and respiration.” 45 C.F.R. § 46.203(d) (1989). A nonviable fetus is a fetus “\textit{ex utero} which, although living, is not viable.” 45 C.F.R. §46.203(e) (1989). A dead fetus is a fetus “\textit{ex utero} which exhibits neither heartbeat, spontaneous respiratory activity, spontaneous movement of voluntary muscles, nor pulsation of the umbilical cord (if still attached).” 45 C.F.R. § 46.203(f) (1989).
\textsuperscript{43} 45 C.F.R. § 46.209(b)(1) (1989).
\textsuperscript{44} \textit{Id}.
\textsuperscript{45} \textit{Id}.
\textsuperscript{46} 45 C.F.R. § 46.209(d) (1989).
\textsuperscript{48} King and Areen, \textit{Legal Regulation of Fetal Tissue Transplantation}, 36 \textit{Clinical Research} 205, 206 (1988).
\textsuperscript{49} 42 U.S.C.A. § 289g(a) (West Supp. 1990).
\textsuperscript{50} \textit{Id}.
\textsuperscript{51} 42 U.S.C.A. § 289g(b) (West Supp. 1990).
The third set of existing federal regulations which affect fetal tissue research is the National Organ Transplant Act. The Act originally prohibited the transfer of organs in interstate commerce for valuable consideration. In June, 1988, Senator Gordon Humphrey proposed amending the Act to include fetal organs and tissues. On June 17, 1988, Congress amended the National Organ Transplant Act. The Act’s scope was extended to include fetal tissues and organs. As a result, any sale of fetal tissues and organs is prohibited.

C. Current State Regulations

The Health Research Extension Act of 1985 allows the states to determine for themselves whether research on fetuses is permissible. The states’ restrictions on research involving living fetuses differ. Unlike the federal requirements, the state restrictions apply whether the research is publicly funded or not. Twenty-five states have no regulations on fetal research. Others expressly regulate research on living fetuses only. Arizona has the strictest regulations. Arizona’s regulations prohibit any research on fetuses, living or dead, unless strictly necessary to diagnose a disease in the mother, and the fetus was aborted because of that disease.

All fifty states have adopted the Uniform Anatomical Gift Act (UAGA) which expressly includes dead fetuses. Under this Act, relatives may donate the fetal cadaver to a specified donee for re-

53. Id.
56. Id.
57. Id.
58. 45 C.F.R. § 46.201(b) (1989).
59. See King, supra note 48, at 206-207.
60. Id. at 206.
62. Id.
64. Id.
search, transplantation, or therapy. The donee may be an individual, a hospital, a university, or a storage bank. The Act structures a hierarchy of persons who may consent to the donation. The order of seniority is: the spouse, an adult child, either parent, an adult sibling, a guardian or any other person authorized or under obligation to dispose of the body. Only the person with the highest seniority who is available can make the gift. If the donee knows of either the decedent's objection or of the objection of a member of the same or higher class, he cannot accept the donation. In the case of a fetus, therefore, both parents must consent to the donation of the fetus for research.

THE INFLUENCE OF ABORTION

The availability of fetal tissue for research is dependent upon the availability of abortions. An estimated 1.5 million electively induced abortions are performed each year. This means that 1.5 million fetuses could feasibly be used each year in fetal tissue research. The availability of abortions is dependent upon both constitutional and ethical considerations. In determining the constitutionality of abortion, courts have examined the mother's right to privacy in the abortion decision. They have also examined the legal status of a fetus as a person. Ethical issues regarding abortion influence fetal tissue research, even though the courts have been hesitant to discuss such issues. Ethical issues arise because those opposed to abortion are opposed to the use of fetal tissue from induced abortions. Resolution of these issues will have a di-

66. Id. at § 3, 8A U.L.A. 41 (1983)[current version at §6(a), 8A U.L.A. 21 (West Supp. 1990)].
67. Id.
68. Id. at § 2(b), 8A U.L.A. 34-35 (West 1983)[current version at §3(a) 13-14 (West Supp. 1990)].
69. Id.
70. Id. at §2(b), 8A U.L.A. 34-35 (West 1983)[current version at § 3(b) 13-14 (West Supp. 1990)].
71. Id. at § 2(c), 8A U.L.A. 34-35 (West 1983)[current version at § 2(b)(3) (1990)].
72. Id.
75. Id. at 156-159.
76. See infra note 142.
77. Id.
rect impact on the future of fetal research.

A. The Constitutional Issues

In the landmark case of *Roe v. Wade*, the United States Supreme Court determined that a woman has a right to privacy in deciding whether or not to abort her child. The right is not absolute. Within the first trimester, a woman may abort for any reason. After the first trimester, the State acquires a compelling interest in protecting maternal health. This compelling interest in maternal health arises because abortion procedures used in this state of pregnancy pose more of a risk to the mother than those used in the first trimester.

The Court rejected the notion that any fetus is a person within the protection of the fourteenth amendment. The Court said that it would begin to recognize the rights of the fetus when it reached viability. It is at this point that the state acquires a compelling interest in protecting the potential life. Viability is defined as the point at which the fetus is capable of independent survival. Past the point of viability, a state may constitutionally prohibit abortion, and thus constitutionally prohibit fetal research on viable fetuses.

The Supreme Court reexamined the trimester approach adopted by *Roe* in *Webster v. Reproductive Health Servs.* calling it "unsound in principle and unworkable in practice." The Court did not suggest an alternative to the *Roe* trimester framework. It did, however, approve of Missouri's statutory approach to regulating abortion.

The Missouri statute at issue in *Webster* stated that "[t]he

79. Id. at 163, 164.
80. Id.
81. Id.
82. Id. at 157-158.
83. Id. at 163.
84. Id.
85. Id. at 163, 164.
86. Id.
88. Id. at 3056 (quoting Garcia v. San Antonio Metropolitan Transit Authority, 469 U.S. 528, 546 (1985)).
90. Id.
life of each human being begins at conception” and “unborn children have protectible interests in life, health and well being.” 91
The statute further provided that if a physician believes the fetus may be older than twenty weeks, he must perform tests to determine in utero the viability of the fetus. 92 The Supreme Court refused to pass upon the constitutionality of the “life begins at conception” language. 93 However, it held the requirement of an examination of the fetus by the physician to determine its viability to be a permissible promotion of the state’s interest in protecting potential life. 94 With the Webster decision, the Supreme Court sanctioned the use of fetal viability as a point at which a state government can regulate abortion. 95

The United States District Court for the Eastern District of Louisiana, used the maternal right to privacy to strike down a Louisiana statute prohibiting nontherapeutic research on any live or dead fetus in Margaret S. v. Treen (Margaret II). 96 Prohibiting research on the fetus to determine the possibility of defects in future pregnancies denied the woman her fundamental right to make an informed decision on whether to abort a later pregnancy. 97 The court further held that because the state’s interest in preserving fetal life ended at fetal death, the statute was an arbitrary infringement on the physician’s right to conduct research. 98 The case implies that the state’s interest must be compelling before it can prohibit any fetal research that will help a woman to make future reproductive choices. 99

91. Id. at 3047.
92. Id.
93. Id. at 3050.
94. Id. at 3055-3058. Senator Metzenbaum stated in the 101st Congress, First Session, on Nov. 17, 1989 that a “counterattack on women’s rights” was imposed by the Court in Webster when it suggested “that the right of privacy announced in Roe and upheld in subsequent cases is not of the status of other fundamental rights.” 135 CONG. REC. S16025 (daily ed. Nov. 17, 1989)(statement of Senator Metzenbaum).
95. Id.
96. Margaret S. v. Treen (Margaret II), 597 F. Supp. 636, 671-76 (E.D. La. 1984), aff’d on other grounds sub nom Margaret S. v. Edwards, 794 F.2d 994 (5th Cir. 1986).
97. Id. at 673.
98. Id. at 672.
99. Note, supra note 2, at 1097.
B. The Ethical Issues

The ethical issues of fetal tissue research are intertwined with the ethical issues of abortion. Persons opposed to abortions object to the use of electively aborted fetuses in fetal tissue research. What are their objections? And what are the ethical issues which arise from abortion’s influence on fetal tissue research?

1. Objections to the Use of Fetuses From Elective Abortions

The use of fetal tissue is not in itself objectionable. Once the fetus has died, it is just like any other cadaver which might be used in medical research or transplantation procedures. In fact, the use of fetal tissue from spontaneous abortion is approved of generally. If all of the needed research and transplantation procedures could be carried out from the spontaneously aborted fetuses, there would be little if any objection. Unfortunately, spontaneously aborted fetuses are often chromosomally defective, diseased, or infected with microorganisms. Also, spontaneous abortions often occur under uncontrolled conditions making the collection of tissue impossible. Therefore, science has turned to electively aborted fetuses for its research. Herein lies the problem. Is the use of fetal tissue from an elective abortion complicity in an immoral act? Will the medical benefits which could result legitimize and encourage abortions?

a. Complicity in an Immoral Act

Those opposed to abortion feel that the electively aborted fetuses are morally tainted. The argument is that the transplantation of fetal tissue is complicity in an immoral act. Professor John Robertson, a member of the NIH Panel on Fetal Tissue

---

100. Greely, supra note 8, at 1094.
101. Id. at 1094.
103. Id.
105. Special Project, supra note 61, at 960.
106. Id. at 961.
107. See Greely, supra note 8.
109. Robertson, supra note 73, at 6.
Transplantation Research rebuts the complicity argument with a homicide analogy.\textsuperscript{110} Robertson contends that one would never argue that the surgeon who transplants organs from a murder victim into a recipient is an accomplice in the murder.\textsuperscript{111} As long as transplantation and abortion procedures are kept entirely separate, the surgeon injecting the fetal tissue into the recipient is not an accomplice in the abortion.\textsuperscript{112} Benefitting from an immoral act is not complicity if one had no part in procuring the underlying act producing the benefit.\textsuperscript{113} "If the complicity claim is doubtful when the underlying immorality of the act is clear as with . . . [the] transplants from murder victims, it is considerably weakened when the act making the benefit possible is legal and its immorality vigorously debated as is the case with abortion."\textsuperscript{114}

\textbf{b. Legitimizing and Encouraging Abortions}

A second objection to the use of electively aborted fetuses is that medical benefits of fetal tissue research, such as the cure of Parkinson's disease, will legitimize and encourage abortions.\textsuperscript{115} The potential to save lives would induce women to have abortions who might not have considered them before.\textsuperscript{116} The Stanford Committee on Ethics examined the inducement-to-abort issue.\textsuperscript{117} The committee concluded that if the inducement to abort could be avoided, fetal tissue may be ethically used.\textsuperscript{118} In order to avoid inducing

\textsuperscript{110. Id.}
\textsuperscript{111. Id.}
\textsuperscript{112. Id.}
\textsuperscript{113. Id.}
\textsuperscript{114. Id. Reverend John C. Rankin of the New England Christian Action Council in Gloucester, Maine, questions Dr. Robertson's analogy. Rankin points out that: No issue is ever raised about a person's possible complicity with the murderer in such a contest. But with abortion, this question is repeatedly raised . . . [T]here is a glaring difference in the definition of 'murder' as against the law with respect to born human beings, on the one hand, and the current legality of abortion, on the other hand. Finally, this analogy kills itself if Robertson wishes to leave his controlling assumption intact. Namely, if murder and abortion are thus analogically paralleled in terms of relations to complicity, why are they not parallel in moral terms? Rankin, \textit{The Fetal Tissue Debate on Complicity}, 20 HASTINGS CTR. REP. 50 (1990).}
\textsuperscript{115. Id.}
\textsuperscript{116. Id.}
\textsuperscript{117. Greely, \textit{supra} note 8, at 1094.}
\textsuperscript{118. Id.}
women to have abortions, the committee suggested that the government disallow any benefit to the mother whatsoever. The Stanford Committee further suggested that the government disallow any benefit to the surgeon or institution performing the abortion thereby removing any incentive the physician might otherwise have to encourage the abortion. The committee decided that the question to ask in determining whether fetal transplantation is ethical is: Did the potential use of the tissue encourage the abortion? If the answer is yes, then the uterus is no more than a factory, and the use of the fetus should not be allowed. If the answer is no, then the propriety of abortion itself is irrelevant to subsequent use of the tissue.

2. The Ethical Issues of Fetal Tissue Research Which Result From Abortion's Influence

Many ethical issues arise which deal with ways in which abortion affects fetal tissue research. For example, what is the moral status of the fetus? Can a mother who has decided to abort her child effectively represent the best interests of the child? Is aborting for the purpose of providing tissue for transplantation ethical? The future of fetal research is dependent upon the resolution of these ethical issues.

a. The Moral Status of the Fetus

The National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research was established in 1974 to examine the area of human experimentation. In discussing research on live fetuses, the Commission identified four possible views concerning the status of the fetus and the implications of each. The fetus can be considered:

1. As a human being. Proponents of this view would argue either that personhood begins at conception, because at conception, the

120. Greely, supra note 8, at 1094.
121. Id.
122. Id.
123. Id.
124. Special Project, supra note 61, at 968.
125. Id. at 995.
fetus acquires a soul; or they would argue that there is no significant difference between the fetus and an infant.
2. As a piece of tissue. Proponents here would argue the dissimilarities of the fetus and adults. The inability to think, communicate, or feel render the fetus more as an organ than a person.
3. As an animal. Proponents here compromise between personhood status and tissue status. The fetus deserves the respect given to animals in research such as avoiding unnecessary agony.
4. As a separate class. Proponents view the status of the fetus as superior to an animal, yet short of the status of an adult. Their views are based on the underlying issues concerning abortion rather than the inability of the fetus to "realize its potential." 

Before it can be determined whether fetal tissue research should be permitted, one must determine which of these views of fetal personhood will be adopted. It can then be decided whether the current methods of fetal transplantation give the fetus the proper measure of respect.

Dr. Carson Strong, Associate Professor of Human Values and Ethics at the University of Tennessee, and Dr. Garland Anderson, Chief of Maternal Fetal Medicine at the University of Tennessee, have recently published an article, The Moral Status of the Near-Term Fetus. These men suggest that even if one assumes that the fetus has the status of a person, it does not necessarily follow that killing the fetus can never be condoned. To demonstrate, an analogy of one who kills in self-defense is used. One who kills another because his own life is in danger is morally justified. Thus the mother who aborts because her life is in danger is justified. Strong and Anderson stretch their analogy to include one who kills to protect the life of another. If killing to save the life of another is morally just, then one who aborts her fetus to save

126. Id. at 995-96.
127. Dickson, supra note 108, at 465. The British Polkinghorne Report suggested that a fetus achieves the same moral status as a fully developed person from the 14th day after conception.
128. See Special Project, supra note 61, at 995.
130. Id.
131. Id.
132. Id.
133. Id.
134. Id.
the life of another is morally justified.\textsuperscript{135} The purpose of the analogy was to exonerate the mother and the physician respectively from any moral wrongdoing.\textsuperscript{136} However, the arguments imply that simply determining the personhood of a fetus will not settle the issue of whether procuring tissue from a fetus to save the life of another is ethically permissible.\textsuperscript{137}

\textit{b. The Mother's Ability to Consent}

Allowing a mother who has decided to abort her fetus to decide whether the fetus may be used for research is one of the most problematic areas of fetal tissue research.\textsuperscript{138} Under the UAGA, a mother can legally donate her child's body to a hospital for research.\textsuperscript{139} She can therefore donate the cadaver of her electively aborted fetus so that the fetal tissues and organs may be transplanted into a recipient.\textsuperscript{140} However, the fetal situation is unique because the mother is directly responsible for the fetus' death.\textsuperscript{141} Fetal research opposers argue that because the mother's intentional act will harm the fetus, her interest in aborting the child conflicts with her ability to act in the child's best interest.\textsuperscript{142} The mother's consent is therefore defective.\textsuperscript{143}

Several arguments counter the defective consent theory. Professor Robertson argues that presumptively taking away a mother's interest in the after-abortion treatment of her fetus would "lead to a policy of using fetal remains without parental consent or to a total ban on fetal transplants."\textsuperscript{144} Neither result is desirable.\textsuperscript{145} Professor Robertson points out that the defective consent theory is mistaken on two grounds.\textsuperscript{146} The theory first assumes that the

\begin{thebibliography}{146}
\bibitem{135} Id.
\bibitem{136} Id.
\bibitem{137} Id.
\bibitem{138} See Robertson, \textit{supra} note 73.
\bibitem{139} \textsc{Uniform Anatomical Gift Act} §§ 1-11, 8A U.L.A. 15-67 (West 1983) [current version at §§ 1-16, 8a U.L.A. 7-27 (West Supp. 1990)].
\bibitem{140} Id.
\bibitem{142} Levine, \textit{Fetal Research: The Underlying Issue}, 261 \textsc{Scientific Amer.} 112 (1989).
\bibitem{143} Jonsen, \textit{supra} note 141, at 218.
\bibitem{144} Robertson, \textit{supra} note 73, at 9.
\bibitem{145} Id.
\bibitem{146} Id.
\end{thebibliography}
dead has an interest to protect.147 Requiring the consent of the next-of-kin before cadaveric remains may be donated protects the interests of the next-of-kin, not the decedent.148 Secondly, the theory assumes that the woman no longer has an interest in what happens to the fetus once it has been aborted.149 Professor Robertson states, "[a]s a product of her body and potential heir that she has for her own compelling reasons chosen to abort, she may care deeply about whether fetal remains are contributed to research or therapy to help others."150 A woman's interest should therefore be protected.151

Dr. Albert R. Jonsen, Professor and Chairman of the Department of Medical History and Ethics at the University of Washington, Seattle, takes a more extreme view concerning a mother's ability to consent.152 Dr. Jonsen says that consent is not necessary for the moral acceptability of using cadavers for research and transplantation.153 Societal requirements of consent stem from our country's cultural background.154 "We are reluctant to have things done to the dead that they would not have wanted or that are repugnant to the survivors."155 In fact, some countries view the use of cadaveric tissue without any consent by the next-of-kin as both legally and morally acceptable.156 Dr. Jonsen further points out that the usual purposes for requiring consent, protecting personal autonomy, and protection from exploitation and harm, are no longer relevant when the donor is dead.157 The secondary purposes of the consent requirements, namely respecting the decedent's prior wishes or the cultural norms, are outweighed by the interests of saving another life.158 The mother's consent is therefore only incidental to the ethical use of the fetal tissue.159

147. Id.
148. Id.
149. Id.
150. Id.
151. Id.
152. Jonsen, supra note 141, at 218.
153. Id.
154. Id.
155. Id.
156. Id.
157. Id. at 219.
158. Id.
159. Id.
c. Aborting for the Purpose of Fetal Transplantation

Another ethical objection to the use of fetal tissue is that women will abort their fetuses for the purpose of fetal transplantation and research. This "slippery slope" argument envisions women aborting to procure tissue for a sick relative or for monetary gain. Already in the United States, persons have indicated a willingness to conceive for transplantation purposes. In 1988, Ray Leith, whose father had Parkinson's disease, indicated on national television that she would become pregnant so that the fetus' tissue could be implanted into her father. Her father declined the offer. More recently, Mary Ayala became pregnant with the intention of donating some of the baby's bone marrow to her seventeen-year-old daughter suffering from leukemia. The transplantation will occur after delivery, when the baby is six months old.

Professor Robertson distinguishes between mothers who decide to abort after they have conceived, and those who conceive for the purpose of aborting. Currently, deciding to abort after one becomes pregnant is a legal practice. A pregnant woman may abort her fetus and donate it to a private research institution for transplantation procedures. Most proponents of elective abortion accept a woman's decision to abort and donate the fetal tissue to research. However, these proponents decline to accept conceiving for abortion as morally permissible. Purposeful conception and abortion to obtain the fetal tissue denigrates the status of the fetus as a means to an end, rather than an end in itself. Therefore, in order to prevent abuse, these proponents propose

161. Id.
163. Id.
164. Id.
166. Id.
167. Robertson, supra note 73, at 7-8.
169. See supra note 139.
170. Robertson, supra note 73, at 7-8.
171. Id.
172. Id.
that the government ban all intrafamilial fetal transplantations and restrict the right of the mother to designate a recipient.173 However, deciding to abort after the onset of pregnancy is also using the fetus as a means to an end.174 "As long as abortion of an existing pregnancy for transplant purposes is ethically accepted, conceiving in order to abort and procure tissue for transplant should also be ethically acceptable when necessary to alleviate great suffering in others."175 Furthermore, if abortions performed when the mother's life is at risk are morally unobjectionable, those performed to procure compatible tissue for the mother who suffers from a terminal disease should be morally acceptable as well.176

Another criticism of aborting with the intent to donate the fetal tissue is that the method of abortion used could depend on the decision to donate.177 If the success of the transplantation depends upon the age of the fetus, the mother intending to donate her fetus would have to carry the fetus until the proper time.178 She would then be subjected to the method of abortion which would produce the most intact cadaveric tissue.179 The government does not allow procedures to be used which increase the risk to the mother or the fetus solely for the sake of the activity.180 If the abortion can be performed in a way that produces better tissue samples, yet poses no additional risk to the mother, women might be pressured to adopt this technique.181

Any statutes restricting the methods of abortion will not be effective until after the third month of pregnancy.182 Roe v. Wade determined that the state's compelling interest in protecting the mother does not begin until the end of the first trimester.183 During the first three months, a woman is free to choose the method of

173. Id.
174. Id.
175. Id.
176. "If the opportunity to use fetal tissue to preserve or save actual life is denied, we would be demeaning and devaluing actual life by denying it the help it needs, and thus ironically viewing potential life more than actual life." Spielberg, Letter to the Editor, 321 NEW ENG. J. MED. 1609 (1989).
177. Mahowald, supra note 160, at 221.
178. Id.
179. Id.
181. Annas, supra note 104, at 1081.
183. Id.
abortion to be used.\textsuperscript{184} If the mother intends to donate the fetus for transplantation, her choice of abortion methods will most likely be the method which produces the best fetal tissue samples.\textsuperscript{185}

Fetal transplantation opponents fear that the procedure will become commercialized.\textsuperscript{186} The National Organ Transplant Act prohibits the sale of organs, including fetal remains.\textsuperscript{187} Any commercialization of the fetal cadavers is therefore currently illegal.\textsuperscript{188} Of course, the regulation cannot prevent the illegal sale of fetal remains which some commentators feel will happen.\textsuperscript{189} The Stanford Committee feels that a black market for fetal organs is highly unlikely.\textsuperscript{190} "Unlike street drugs, fetal tissue would not be self administered. Medical intervention would be necessary."\textsuperscript{191} As long as the transplanting physicians act lawfully and use only the tissue from legitimate sources, the danger of a black market is nonexistent.\textsuperscript{192}

**THE FUTURE OF FETAL TISSUE RESEARCH**

The future of fetal research depends upon the future of abortion because abortion is the source of tissue for fetal research. By controlling the abortion issue, a government can control the use of electively aborted fetal tissue. Internationally, countries such as Canada and Britain have approved of fetal tissue research. In the United States, the government and all of its regulations will ultimately determine the future of fetal tissue research.

A. *The Future of Abortion*

The future of abortion is not as settled now as it was in 1973, when the Supreme Court decided *Roe v. Wade*.\textsuperscript{193} In 1989, the Supreme Court attacked *Roe* for the first time in the case of *Webster*.

\textsuperscript{184} Id.
\textsuperscript{185} Mahowald, *supra* note 160, at 221.
\textsuperscript{186} 135 CONG. REC. E4066 (daily ed. Nov. 21, 1989).
\textsuperscript{187} Murphy, *The Ethics of Research Using Human Fetal Tissue*, 321 NEW ENG. J. MED. 1608 (1989).
\textsuperscript{188} Id.
\textsuperscript{189} Id.
\textsuperscript{191} Id.
\textsuperscript{192} "Although some organs are scarce and potentially very valuable, we have seen no black market of human organs in the United States." *Id.*
v. Reproductive Health Services. In a plurality opinion, the Court upheld a Missouri statute requiring a physician to determine the viability of a fetus before performing an abortion. The Court also rejected the trimester approach of Roe for determining when a state’s interest in maternal health becomes compelling. In upholding the Missouri statute, the Court gave states more power to regulate abortion than it had given in the past. With the conservative majority present in the Supreme Court today (O'Connor, Scalia, White, Kennedy and Rehnquist), it will be interesting to see whether the court will extend a state’s power to regulate abortion even further—perhaps even to overrule Roe v. Wade.

A bill was introduced to Congress in response to the Webster decision on November 17, 1989. The Freedom of Choice Act of 1989 proposes to codify the Roe v. Wade decision in order to protect a woman’s right to abort from extensive regulation by the states. “To the extent that Webster both invites and approves

195. Id. at 3054-58.
196. Id. at 3056-57.
199. 135 CONG. REC. S16024. The text of the Freedom of Information Act of 1989 is as follows:

Section 1. Short Title
This Act may be cited as the “Freedom of Choice Act of 1989”.

Section 2. Right to Choose
(a) In General- Except as provided in subsection (b), a state may not restrict the right of a woman to choose to terminate a pregnancy
(1) before fetal viability; or
(2) at any time if such termination is necessary to protect the life or health of the woman.
(b) Medically Necessary Requirements- A State may impose requirements medically necessary to protect the life or health of the woman referred to in subsection (a).

Section 3. Definition of State
As used in this Act, the term “State” includes the District of Columbia, the Commonwealth of Puerto Rico, and each other territory or possession of the United States.


200. “With the Court’s decision in Webster last July, the protection for a woman’s right to choose was placed in serious jeopardy . . . The Court invited the States to place restrictions on the rights of women - and many states are attempting to do so.” 135 Cong. Rec. S16052 (daily ed. Nov. 17, 1989)(statement of Senator Packwood).
erosion of the Roe rights, this legislation is intended to reverse the impact of that decision." The Freedom of Choice Act of 1989 provides that "(a) state may not restrict the constitutional right of a woman to choose". Whether or not the bill is adopted, Webster gives the states more authority to regulate abortion than they had in the past. If states choose to regulate abortion more actively, they will indirectly regulate fetal tissue research as well.

B. International Treatment of Fetal Research

Fetal tissue research is unsettled internationally just as it is in the United States. Some countries such as Germany have banned all fetal tissue research. Others, like Canada, have yet to adopt any kind of policy regarding fetal tissue research. Britain, however, has approved fetal research. The guidelines assembled by the Polkinghorne Committee, a committee set up to review issues involving fetal research, have been adopted. In approving fetal research, the committee concluded, "[w]e do not believe that in circumstances of such moral complexity it is right to regard the termination of pregnancy as inevitably so heinous that any subsequent use of the fetal tissue thereby made available is morally disqualified." Unless an international consensus can be reached on these issues, people will simply travel to another country to receive fetal transplantations not available in their own country.

C. Future Treatment in the United States

Will the United States follow the Thatcher administration's adoption of the Polkinghorne Committee's proposal and adopt the NIH panel's conclusions? Probably not. Scientists are reluctant to press the issue for fear that the Bush administration would ban the research. Scientists are waiting until a more liberal adminis-

202. See supra note 200.
206. See Dickson, supra note 108.
207. Id. at 464.
208. Id. at 465.
209. Id. at 464.
210. Id. at 465.
While President Reagan was in office, the Assistant Secretary of Health, Robert Windom, issued a moratorium on all federally funded research involving the transplantation of dead fetal material. The Assistant Secretary appointed a NIH panel to review legal and ethical issues involved in fetal research. However, just days before the panel was scheduled to convene, Gary Bauer, assistant to the President for policy developments, drafted an executive order calling for a complete ban on all federally funded fetal tissue research. When news of the draft hit the press, the White House brushed the order off as a “first cut” that “[did] not represent Administration policy or a presidential decision in any way.” The presidential order was “postponed.”

Although Robert Windom is no longer in office, the moratorium remains in effect. On November 2, 1989, the Bush Administration formally extended the moratorium. The Secretary of Health and Human Services, Dr. Louis W. Sullivan, stated, “[a]fter carefully reviewing all of the materials, I am persuaded that one must accept the likelihood that permitting the human fetal tissue research at issue will increase the incidence of abortion across the country.” Dr. Sullivan therefore extended the moratorium indefinitely.

In response to the ban, Representative Henry Waxman introduced the Research Freedom Act of 1990 to the House on August 3, 1990. This Act proposes to overturn the existing ban on fetal tissue research. The Act also proposes to codify the recommen-

211. Id.
213. Id.
215. Id.
218. Id.
219. Id.
220. Id.
222. Id.
dations of the National Institute of Health advisory panel. Anti-abortionists are adamantly opposing the bill. Dr. Sullivan expects President Bush to veto the bill. With the moratorium seemingly locked in place, the progress of fetal tissue research in the United States will continue to be severely limited.

**Conclusion**

The year is 1990. There is no fetal tissue bank. There is no fetal-farm-for money in Nicaragua. The anonymous sufferer of Parkinson’s disease must continue to suffer, with only levodopa, bromocriptine, and orphenadrine hydrochloride to relieve his symptoms. His hopes of obtaining a successful fetal brain tissue transplantation within his lifetime are nil. Unless the government decides to lift the moratorium and fund the fetal tissue research, thousands of other Parkinsonian patients will suffer the same fate as the anonymous recipient above.

The future of fetal tissue transplantation research is inseparable from the influence of abortion. The tissue used comes from abortions. Abortion procedures determine the useability of the fetal tissue. The mother aborting the fetus must consent to its use in research. Some women are aborting for the purpose of obtaining the tissue for transplantation. Societal attitudes towards abortion will determine the societal acceptance or nonacceptance of fetal tissue research. Persons opposed to abortion are fighting vehemently against the use of fetal tissues for transplantation. A small victory in the war against abortion was won when Assistant Secretary Windom imposed a moratorium on all federally funded research dealing with dead fetuses. Without government funding, researchers’ progress has been and will continue to be limited.

The government is looking at the fetal tissue research issue with blinders on. Much more than the right of a woman to abort her baby needs to be examined when determining whether or not fetal tissue research will be allowed to have a future. The focus must be shifted from the rightness or wrongness of abortion to the preservation of lives of other existing human beings. As long as

---

223. Id.; see supra note 22.
225. Id.
226. See supra note 221.
227. See Lindvall, supra note 27.
Abortion is legal, one’s views concerning abortion are irrelevant to the legality of fetal tissue research. If the government does not recognize a fetus’s right not to be aborted, i.e. it’s rights to life, then how can it recognize a right in the fetus not to be used in scientific research once it is dead? Such a position appears logically inconsistent. Rather than haggle over abortion, the government should take an active role in the new line of research. The research is going to continue in private institutions regardless of whether or not the government funds it. The government has an interest in seeing that procedures used on the recipients are carried out properly. If the government will provide federal funding, then it will have a direct voice in procedures to be used in the transplantation process. “The world is watching, and this opportunity to demonstrate good science, good ethics, and compassionate patient care should not be wasted.”

Angela M. Skerrett

228. Annas, supra note 104, at 1082.