THE LEGITIMIZATION OF FETAL TISSUE TRANSPLANTATION RESEARCH UNDER ROE V. WADE

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I. INTRODUCTION ................................... 896

II. GOVERNMENT REGULATION ............................. 899
   A. The Federal Statute and Legislative History ...... 899
   B. State Regulation .................................. 904

III. THE MEDICINE OF FETAL TISSUE TRANSPLANTATION .............................. 907
   A. The Affected Medical Conditions .................. 907
      1. Parkinson's Disease ............................... 907
      2. Insulin-Dependent Diabetes Mellitus ............. 907
      3. DiGeorge's Syndrome .............................. 908
   B. The Fetus' Tissues .................................. 909

IV. THE ETHICS OF FETAL TISSUE TRANSPLANTATION RESEARCH .................. 910
   A. The Moral Dilemma .................................. 910
   B. Autonomy ............................................ 912
      1. The Woman's Decision ............................. 912
      2. The Fetal Interests .................................. 915
      3. The Physician's Rights ............................. 916
   C. Beneficence and Non-Malfeasance ..................... 918
   D. Respect for Human Dignity .......................... 919
   E. Distributive Justice .................................. 920

V. CONCLUSION .................................. 923

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I. INTRODUCTION

Live, in-utero fetal research illustrates one of society’s acceptable uses of human fetal tissue for therapeutic purposes.\(^1\) Through in-utero fetal research, the application of novel surgical techniques and procedures has allowed physicians to correct various prenatal fetal disorders once thought inevitably debilitating and potentially fatal.\(^2\) By way of a benefits-to-risks balancing analysis, society has been willing to support the practice of live fetus research in-utero so long as it is for the welfare of the affected fetus.\(^3\) Similarly, under implicit government consent, research on tissue from spontaneously aborted, dead fetuses in the 1950s was instrumental in the development of the polio and rubella vaccines.\(^4\) Fetal tissue research can be categorized as research with fetal tissues to develop therapy (e.g., the development of the polio and rubella vaccines) and as transplantation research that uses fetal tissue as therapy. It is this latter use of fetal tissues for research purposes that is the focus of this paper.

Although willing to sanction consensual-by-proxy, therapeutic in-utero intrusions into incompetent live fetuses, society has, in general, refused to extend its approval for similar, potentially therapeutic transplantation research procedures utilizing fetal tissues from elective abortions. Transplantation research using fetal tissue has the potential to cure or greatly improve the quality of life for thousands of patients suffering from a wide variety of presently incurable and potentially debilitating conditions.\(^5\) Early transplantation studies with

\(^{1}\) It is important to distinguish fetal research activities performed on the living fetus in-utero, which is medically and legally defined as potentially therapeutic, from the use of tissue from dead fetuses in research.

\(^{2}\) Various surgical procedures performed on the live fetus while still in-utero are now accepted standard medical practice. Intrauterine fetal surgery is now used to correct hydrocephalus (dilated brain ventricles) and hydronephrosis (dilated kidneys) along with other, less common prenatal disorders.

\(^{3}\) See American Academy of Pediatrics: Committee on Bioethics, Fetal Therapy — Ethical Considerations, 103 PEDIATRICS 1061 (1999). These intrauterine interventions were initially considered highly experimental given their potential risks, including a slight increase in the incidence of stillbirths as well as an increased frequency of post-procedure premature labor and delivery. The benefits of these procedures, however, were with time and experience found to substantially outweigh their inherent risks.

\(^{4}\) These vaccines were developed through the use of fetal cell lines obtained from spontaneous, naturally occurring abortions. See James F. Childress, Ethics, Public Policy, and Human Fetal Tissue Transplantation Research, 1 KENNEDY INST. ETHICS J. 93, 93-94 (1991); Lee M. Sanders, Linda Giudice & Thomas A. Raffin, Ethics of Fetal Tissue Transplantation, 159 W. J. MED. 400, 401 (1993).

\(^{5}\) E.g., James E. Goddard, The N.I.H. Revitalization Act of 1993 Washed Away Many Legal Problems with Fetal Tissue Transplantation Research But a Stain Remains, 49 SMU L. REV. 375, 376 (1996). Pluripotent stem cells obtained from pregnancies that have been terminated have now been successfully isolated and cultured in the laboratory by privately funded research scientists. Department of Health and Human Services, National Institutes of Health Guidelines for Research Using Human Pluripotent
human fetal tissue have shown promising results in alleviating the symptoms of both Parkinson's disease\textsuperscript{6} and insulin-deficient Diabetes Mellitus.\textsuperscript{7} Another less studied area of potential benefit from transplanted fetal tissue research includes the various inherited immune deficiencies such as DiGeorge's Syndrome.\textsuperscript{8}

Society has already decided that, despite the cause of death, the consensual use of human cadavers for organ transplantation, research and medical school dissection is not inherently disrespectful or unethical. Although the use of new fetal tissue transplantation research techniques and procedures may well be unethical if applied prior to adequate investigation through regulated research, the actual transplantation of tissue from dead human fetuses, by itself, should be no more problematic nor objectionable to public policy than dissecting cadavers or transplanting their organs.

Unfortunately, however, the recognized relationship between the transplantation of fetal tissue and elective abortions as the source for such tissue has repeatedly pre-empted society's, and subsequently Congress', acceptability of these potentially therapeutic medical research procedures. The perceived and feared magnitude of this association has effectively clouded any meaningful or productive debate on the \textit{per se} benefits and risks of fetal tissue transplantation research.\textsuperscript{9} In fact, the arguments against fetal tissue transplantation for any purpose, whether therapeutic, educational or research, have so far been limited to only an extended subset discussion on the highly volatile moral issues surrounding abortion rights.\textsuperscript{10} As a result, the con-

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trovery over the morality and therefrom, the legality of fetal tissue transplantation research, has become politically tainted with a pervasive equivocation as to which ethical principles are relevant in determining the legitimacy of this unique treatment intervention. An earnest and focused debate on the ethical, legal and medical issues that arise in the arena of fetal tissue transplantation research thus poses both a challenge and an opportunity.

The fetus’ potential for life has become a determinative issue whenever the ethical approach to transplantation research with dead fetuses is considered, even though the pregnancy’s prerequisite termination makes it clear that such potential will never be fulfilled. Nonetheless, this morally based deterrent erroneously presumes that the option for fetal transplantation research will substantially influence a woman’s prerequisite decision to abort. When contrasted with the similarly compelling ethical and legal interests encompassing the pregnant woman’s decisional autonomy to abort, the physician’s right to perform the research and the seriously ill third person’s concerns in obtaining treatment for their otherwise incurable illnesses, a restrictive, abortion-centered viewpoint will undoubtedly culminate in serious collisional controversies.11

This article contends that ethical and legal, abortion-influenced concerns are unpersuasive and should not bar research with fetal tissue transplanted from aborted dead fetuses as possible therapy for individuals with serious, life-threatening illnesses. Through appropriate government regulations, a woman’s decision to abort can be effectively separated from the subsequent process of consensual fetal donation and transplantation. Consequently, acknowledging that the Supreme Court has adjudged the woman’s decision to abort to be constitutionally protected,12 the lingering ethical queries encircling fetal tissue transplantation should not be whether abortion itself is morally acceptable, but rather, whether such research is justifiable because of its overwhelming curative potential. The only remaining question will then be not whether fetal transplantation research should be done and regulated, but how.

11 (1989) (arguing that the basic moral issue is to refrain from exploiting any individual to benefit others), with Roe v. Wade, 410 U.S. 113 (1973) (legalizing a woman’s right to choose to abort her fetus), and Warren Kearney, Dorothy E. Vawter & Karen G. Gervais, Fetal Tissue Research and the Misread Compromise, 21 HASTINGS CENTER REP. 7 (1991) (countering that the beneficial use of tissue obtained from electively aborted fetuses is not immoral).

11. See infra Part IV.

II. GOVERNMENT REGULATION

A. THE FEDERAL STATUTE AND LEGISLATIVE HISTORY

Even though fetal tissue transplantation had been ongoing in the private sector for many years, the legal controversy surrounding its regulation did not publicly first surface until October 1987, when the then director of the National Institutes of Health ("N.I.H."), James Wyngaarden, requested official approval from the Department of Health and Human Services ("HHS") to fund the use of fetal brain tissue in a research protocol that had already been sanctioned by the N.I.H.'s own review board. The dread of arousing public controversy led the Assistant Secretary for HHS, Robert Windom, to deny the N.I.H. Director's request and, citing ethical concerns, issue instead a temporary moratorium on federal funding for fetal research involving tissue from induced, non-spontaneous abortions. Windom further instructed the N.I.H. to convene an outside advisory committee of experts, known as the Human Fetal Tissue Transplantation Research Panel ("the Panel"), to study and report on the ethical, legal and scientific issues associated with fetal tissue transplantation research. The Panel was principally charged with addressing ten questions concerning the alleged connection between elective abortions and the use of human fetal tissue in research.

The Panel's completed report recommended not only the acceptance of the report and its recommendations, but also the lifting of the moratorium on federal funding of human fetal tissue transplantation research and the development of additional guidelines, as appropriate, to implement the advisory committee's conclusions. Disregarding the Panel's contrary conclusions that the use of human fetal tissue for transplantation research was acceptable public policy, Windom chose to continue the moratorium indefinitely on the unconfirmed grounds.

15. The advisory committee was appointed during the summer of 1988 and consisted of twenty-one ethicists, lawyers, biomedical researchers, clinical physicians, public policy experts, and religious leaders recommended for participation by members of Congress and the Executive Branch as well as by various reputable national research organizations.
16. The content of the questions posed to the advisory committee can be found in Childress, 1 KENNEDY INST. ETHICS J. at 95.
that this type of research would increase the incidence of electively induced abortions. Windom's administrative declaration entirely ignored the Panel's recommendations that effective safeguards could be erected to ensure that abortions solely for research purposes would not occur.\footnote{18} In reality, however, even before this stirring public interchange within the Executive branch transpired, funding for fetal tissue research had already been clearly limited by Congress since 1974 through a series of provisions amended to the Public Health Services Act of 1944.\footnote{19}

The 1974 amendments to the 1944 Public Health Services Act statutorily established a National Advisory Council for the Protection of Subjects of Biomedical and Behavioral Research ("the Council").\footnote{20} Subsequent to the Council's recommendations, Congress embarked on a multi-session odyssey of investigative hearings, planning committee meetings and unsuccessfully proposed bills that after a prolonged and complex legislative process eventually culminated in the passing of the Health Research Extension Act of 1985 ("1985 Act").\footnote{21} Provisions within the 1985 Act outlined the limitations under which research on any non-viable, aborted fetuses, as well as on ex-utero living fetuses, for whom viability had not been ascertained could be conducted and federally funded.\footnote{22} Specifically, section 498(a) of the 1985 Act restricted fetal research and experimentation only to those projects which could enhance, without imposing added risks, the

health quality of the involved fetus and whose purpose was to advance important biomedical knowledge not obtainable by other means. Concurrent with these provisions, the 1985 Act also abolished the Secretary of HHS's independent authority to grant a waiver or modification of the above-listed statutory requirements for any fetal research with a greater than minimal or unknown risk. As the federal government is the major source of subsidies for this complex and costly research, its continued abstinence from providing funding functionally served as a multi-year suspension of any clinically significant fetal tissue transplantation research.

In spite of increasing opposition to the ongoing moratorium from growing factions in Congress, multiple ensuing attempts by the legislature to eliminate the statutory restrictions on fetal tissue transplantation research were repeatedly frustrated by political pressure from powerful constituents and the veto power of the Executive branch. With the installation of a new administration in 1992 however, the White House's view on fetal tissue transplantation dramatically re-


25. Even with an increasing legislative antagonism, the moratorium on federal funding for fetal tissue transplantation research was extended again in 1988 by the Health Omnibus Program Extension of 1988, Pub. L. No. 100-607, § 156, 102 Stat. 3059 (codified as amended at 42 U.S.C. § 289g(c)(2)-(3)(1988)), repealed by National Institutes of Health Revitalization Act of 1993, Pub. L. No. 103-43, § 121(b)(1), 107 Stat. 133 (1993). Four years later, President Bush vetoed a narrow congressional majority's legislative attempt to lift the moratorium. In a strong message to Congress, President Bush asserted the need for prohibiting federal funding of such research. Unlike his predecessor, President Bush explicitly claimed that the lifting of said ban would unacceptably increase the number of elective abortions. Message to the House of Representatives Returning Without Approval the National Institutes of Health Revitalization Amendments of 1992, 28 WEEKLY COMP. PRES. DOC. 1005-06 (June 23, 1992). Lacking the necessary two-thirds votes in support, Congress was unable to override President Bush's veto.
versed. Within a few months, a bill implementing new, permissive federal fetal tissue transplantation research policies was introduced in the Senate, amended by the House of Representatives, and soon thereafter, passed by both houses of Congress. The N.I.H. Revitalization Act of 1993 ("1993 Act"), as codified, fundamentally follows the original recommendations made by the 1988 N.I.H.'s advisory panel of experts. The 1993 Act specifically establishes that the use of fetal tissue for transplantation research is legally and ethically permissible when maternal consents to the abortion and fetal tissue donation are separate and distinct, when the necessary informed consent from the donor, researcher and donee are obtained after full disclosure and when the donated fetal tissue is neither provided in exchange for financial consideration nor designated by the donor to a specific recipient.

The 1993 Act introduced unto Title 42 of the United States Public Health and Welfare Code two new statutory provisions distinctly directed to fetal tissue transplantation research and the allowable prohibitions thereon. Foremost, section 289g of the 1993 Act em-


28. S. REP. No. 103-2, 103d Cong., 1st Sess., at 22. The Senate report lists the findings of the 1988 N.I.H. panel that were made in response to the questions posed by the then HHS's assistant Secretary Windom. See supra note 16 and accompanying text. The advisory panel's summary findings included, inter alia, the following conclusions:

1. Since abortion is legal and transplantation research is intended to achieve significant medical goals, the use of tissue from induced abortions is "acceptable public policy;"
2. There is no evidence that use of fetal tissue for research has affected decisions regarding abortions, and safeguards can be applied to minimize any possible encouragement for abortion;
3. The process for obtaining informed consent from a pregnant woman for a donation of fetal tissue for research does not constitute an inducement to abortion;
4. A pregnant woman's consent to donate fetal remains for research is necessary and sufficient for use of the tissue;

6. Requests to donate tissue should be separate from consent to the abortion and no fees should be paid to the donor or clinic for procurement of fetal tissue.

30. Id.
powered the Secretary of HHS to "conduct or support research on the transplantation of human fetal tissue for therapeutic purposes." The 1993 Act also clarified the definition of human fetal tissue to include tissue or cells obtained from fetuses "after a spontaneous or induced abortion . . . ." Additional provisions described the specific requirements for securing informed voluntary consent from the donor, as well as from the researcher and the donee. Of particular significance is section 289g-1 of the 1993 Act which unambiguously addressed the need for a written and signed statement by the attending physician clearly declaring that the intended research had no bearing on the induced abortion which produced the fetal tissue. Section 289g-1 of the 1993 Act further required that the attending physician's statement must likewise assert that the woman undergoing the abortion received full disclosure as to the physician's interests, if any, in the research to be conducted prior to giving consent.

Alternatively, whereas section 289g-1 of the 1993 Act outlines the procedures necessary for the federal legitimatization of fetal tissue transplantation research, section 289g-2 of the 1993 Act codifies both the permissible legal prohibitions attachable to such research, as well as the criminal penalties to be imposed for violation of the 1993 Act's enforcement provisions. Of specific interest within section 289g-2 of the 1993 Act are the listed, strict prohibitions on the selling or purchasing of fetal tissue for valuable consideration and on the solicitation or acceptance of such tissue for the purpose of transplanting it unto a designated recipient pre-specified by the donating individual. Acknowledging the considerable disparity in the individual State's fetal tissue transplant regulations, section 289g-1 of the 1993 Act additionally emphasizes that it is mandatory for the Secretary of HHS to be in "accordance with applicable State and local law" before he may conduct or provide support for any experimentation involving human

32. 42 U.S.C. § 289g-1(g) (1994). The Department of Health and Human Services has recently opined that human pluripotent stem cells derived from fetal tissue fall within the legal definition of human fetal tissue and are therefore, subject to federal restrictions on the use of such tissue. NIH Guidelines, supra note 5, at 3.
33. 42 U.S.C. § 289g-1(b) & (c) (1994).
36. 42 U.S.C. § 289g-2(a) to (c) (1994).
37. 42 U.S.C. § 289g-2(a) & (b) (1994). This explicit prohibition, however, was neither surprising nor unexpected since, in an amendment to the National Organ Transplant Act in 1988, Congress had already made it clear that commercialization of human organs, "or any subpart thereof, including that derived from a fetus" was to be strictly forbidden. Health Omnibus Programs Extension of 1988, Pub. L. No. 100-607, § 407, 102 Stat. 3116 (codified at 42 U.S.C. § 274e(a), (c)(1) (1994)).
fetal tissue. This last provision functionally defers to the individual states the responsibility of legislating and enforcing public policy in the field of fetal tissue transplantation research.

B. STATE REGULATION

The 1993 Act established a series of clearly defined guidelines for federal funding of fetal tissue transplantation research and intended them to be promulgated uniformly, as well as monitored for compliance, by the N.I.H. in both publicly and privately funded research protocols. In general, however, both the 1993 Act and the administrative regulations that followed concede the actual management of fetal tissue acquisition and its subsequent disposition to the applicable, individual state laws.

State regulation of fetal tissue transplantation research is permissible under a state's federal constitutional grant of power to govern matters of public health and safety. To encourage equality among the states, the Uniform Anatomical Gift Act ("U.A.G.A.") was first offered in 1968 as a consistent legal standard by which to regulate tissue donation from all dead humans for therapeutic and research

39. S. REP. No. 103-2, 103d Cong., 1st Sess. 20, 23 (1993), reprinted in 1993 U.S.C.C.A.N. 196, 218. Subsequent to the legislature's intent and under the authority granted by 42 U.S.C. § 289g(a) & (b), the Department of Health developed practical and specific administrative regulations detailing the process to be followed by the Secretary in appropriating federal funds to support research and related activities involving the fetus. 45 C.F.R. § 46.201-11 (1995). These precise regulations define the permissible research activities that may qualify for federal grant support as well as the limitations thereon. 45 C.F.R. §§ 46.201-03, .206, .208-10 (1995). Subsections 46.208 and .209 address, respectively, the use of in-utero (in the womb) and ex-utero (out of the womb) fetuses as research subjects. Moreover, these subsections also list the various requirements imposed by the federal regulations both on the purpose and allowable risks of the intended activity and for obtaining the necessary, parental informed consent for the proposed fetal tissue transplantation research. 45 C.F.R. § 46.209(b) (1995). Part 46 of Title 45 of the Code of Federal Regulations mandates that any research involving fetuses requires review and approval by an Institutional Review Board ("I.R.B."). 45 C.F.R. § 46.205 (1995).
40. See infra note 41 and accompanying text. See also 45 C.F.R. § 46.210 (1995) (clarifying that "activities involving the dead fetus, macerated fetal material, or cells, tissue, or organs excised from a dead fetus shall be conducted only in accordance with any applicable State or local law regarding such activities").
41. U.S. CONST. amend. X (noting "[t]he powers not delegated to the United States by the Constitution, nor prohibited by it to the States, are reserved to the States"). See also California Reduction Co. v. Sanitary Reduction Works, 199 U.S. 306, 318 (1905) (noting "it may be taken as firmly established in the jurisprudence of this court that the States possess, because they have never surrendered, the power . . . to prescribe such regulations as may be reasonable, necessary and appropriate, for the protection of the public health and comfort . . ."); Jacobson v. Massachusetts, 197 U.S. 11 (1905) (ruling that the police power of a State comprises the authority to enact directly health laws of every description to safeguard, by appropriate means, public health, safety, and morals).
purposes. Following its substantial revision in 1987, the Revised Uniform Act ("Revised U.A.G.A.") now includes a provision, among others, delineating the U.A.G.A.'s specific applicability to dead fetuses. Of interest, however, in lieu of the newer 1987 revised version, many of the fifty United States have, in fact, enacted alternate, more restrictive legislation that places greater limits on experimentation, whether potentially therapeutic or not, upon aborted, dead fetuses than those limits already listed within the text of the U.A.G.A. Unfortunately, as a result of these individualized state statutes, fetal tissue transplantation research regulations lack uniformity and, thereby, add to the confusion and controversy endangering the ethical legitimacy of these potentially therapeutic procedures.

Although lacking uniform national applicability, both versions of the U.A.G.A. permit the use of human fetal tissue for the purposes of education, research, and the advancement of science. The Revised U.A.G.A. requires that a physician determine the time of fetal death and obtain parental consent prior to the donation of fetal tissue. Within the latter context, the Revised U.A.G.A. also establishes that either parent potentially possesses final decisional authority in grant-


46. U.A.G.A. § 3(1)-(4), 8A U.L.A. 106-07 (1968) (amended 1987); U.A.G.A. § 6(a)(1)-(3), 8A U.L.A. 53 (1968) (amended 1987). Whereas, both uniform laws also include transplantation as an additional, permissible purpose for which anatomical gifts may be made, the newer, revised version reverses the listed sequence by placing transplantation ahead of education, research and the advancement of science. By so doing, the Revised U.A.G.A. deliberately emphasizes the importance of transplantation as a primary purpose of organ and tissue donation.

ing such consent. The Revised U.A.G.A. version, however, explicitly prohibits the actual sale or purchase of human body parts for any consideration beyond that necessary to pay for the expenses incurred in the removal, processing, and transportation of the tissue. Lamentably, unlike the present federal law on the issue, the Revised U.A.G.A. contains a potentially controversial provision that permits the person giving consent for the fetal tissue donation to designate its recipient. Nonetheless, considering that its controlling terms apply only to non-viable, already dead fetuses, it is unlikely that even with universal acceptance and application of its intended purpose, that the Revised U.A.G.A. will resolve the already-existing controversy surrounding fetal tissue transplantation.

48. U.A.G.A. § 3(a)(3), 8A U.L.A. 40 (1968) (amended 1987). The Revised U.A.G.A. further specifies that the individual parent's right to consent to donate is not absolute and exists only if the other does not object. U.A.G.A. § 3(b)(3), 8A U.L.A. 41 (1968) (amended 1987). The U.A.G.A., however, does not explicitly list any exceptions to the father's right to consent to donate such as when the pregnancy results from rape or incest.


50. 42 U.S.C. § 289g-2(b)(1) to (2) (1994) (prohibiting the designation of a specified person or relative of the donating individual as the transplant recipient if the human fetal tissue to be transplanted will be or is obtained pursuant to an induced abortion and the donation affects interstate commerce). See supra notes 38-39 and accompanying text. See also U.A.G.A. § 6(a)(3)-(b), 8A U.L.A. 53 (1968) (amended 1987) (allowing an anatomical gift to be made to, and received by, a designated donee for transplantation or for therapy needed by said donee individual). Even though the language of the N.I.H. Revitalization Act of 1993 permits a state's adoption of this provision of the Revised U.A.G.A., 42 U.S.C. § 289g-1(e), five of the nineteen states so far adopting the uniform act's 1987 revisions have opted to either delete or substantially restrict this directed donation. N.D. CENT. CODE ANN. § 23-06.2-06 (1991) (substituting specified for designated in all the applicable subsections); N.M. STAT. ANN. § 24-6A-6 (Michie Supp. 1996) (noting "donee may not be designated on the basis of donee's race, age, religion, color, national origin, ancestry, gender, sexual orientation or physical or mental handicap's."); Or. REV. STAT. ANN. § 97.270 (1990) (omitting section six in its entirety); R.I. GEN. LAWS § 23-18.6-6 (Michie 1956) (requiring designated donee to be a living/related individual); VT. STAT. ANN. tit. 18, § 5242 (1995) (deleting section 6(a)(3)).

III. THE MEDICINE OF FETAL TISSUE TRANSPLANTATION

A. THE AFFECTED MEDICAL CONDITIONS

1. Parkinson’s Disease

Parkinson’s disease is a devastating neurological disease that occurs mostly in middle age individuals and is caused by the degeneration of brain cells in a region of the midbrain called the substantia nigra.\(^5\) Death of these cells causes the patient to suffer a variety of progressive neuromuscular impairments including rigidity, difficulty initiating purposeful movements and tremor; the underlying cause is not known.\(^5\) Drug therapy is only partially effective and has significant side effects that limit its use.\(^5\) Animal experiments over the last twenty years have demonstrated that fetal brain cells injected into the brains of animals afflicted with a Parkinson’s-like condition will survive, grow and, more importantly, restore normal neuromuscular movements in the transplanted, diseased animals.\(^5\) Similar studies introducing brain tissue from human fetuses into adult patients with Parkinson’s disease have also been performed independently in a number of foreign countries including Sweden, Cuba, China, Mexico and England.\(^6\) Although varying in range from minimal to substantial, most of these studies have observed meaningful therapeutic patient improvements, mostly in the form of decreased frequency of rigid spells, without evident adverse side effects.\(^5\)

2. Insulin-Dependent Diabetes Mellitus

Juvenile, insulin-dependent diabetes is caused by the autoimmune destruction of insulin-producing cells in the pancreas.\(^5\) Unless

\(^5\) D.C. Marsden, Oxford Textbook of Medicine, 3999-4000 (D. J. Weatherall et al. eds., Oxford Univ. Press 1983). A much rarer form of Parkinson’s Disease with its onset in childhood has also been described. Kenneth F. Swaiman, Pediatric Neurology: Principles and Practice, 1071-72 (Kenneth Swaiman, ed., Mosby 1989). The clinical course of Juvenile Parkinson’s can be similarly as progressive and debilitating as the adult form.

\(^5\) Marsden, supra note 52, at 3998-99; Swaiman, supra note 52, at 1072, 1352.

\(^5\) Marsden, supra note 52, at 4000-03.


\(^5\) Ryan, 65 S. Cal. L. Rev. at 686. See Goddard, 49 SMU L. Rev. at 379 (cautioning that the reported improvements in human Parkinson’s patients after fetal tissue transplantation may have unrelated, alternative explanations).

\(^5\) Goddard, 49 SMU L. Rev. at 379; Ryan, 65 S. Cal. L. Rev. at 686.

therapeutically corrected, the resultant lack of insulin allows blood sugar levels to rise to dangerous and potentially lethal levels.\textsuperscript{59} Although treatment with daily injections of insulin can effectively stop the progression of diabetes, it cannot cure the disease.\textsuperscript{60} In the United States alone, over one million individuals are presently afflicted with this type of diabetes with thousands of new cases diagnosed year after year.\textsuperscript{61} Along with premature death from acute metabolic derangement, the chronic, long term complications of diabetes include blindness, heart disease, kidney failure and decreased circulation in the extremities potentially leading to amputation.\textsuperscript{62}

Transplantation studies in diabetic rats using insulin-producing cells from the fetal rat pancreas have led to a reversal of the diabetic animal’s insulin dependence and the permanent correction of their blood sugar elevation.\textsuperscript{63} Similar experiments in diabetic humans using fetal pancreatic tissue, however, have not been as successful, with only partial and even then, only transient reductions in the insulin requirements of a minority of the transplant recipients.\textsuperscript{64} Nevertheless, these results suggest that, if further researched and developed, fetal pancreatic tissue transplantation could become a potentially curative, treatment intervention method for this prevalent and devastating disease.\textsuperscript{65}

3. DiGeorge’s Syndrome

DiGeorge’s Syndrome is a rare congenital disease caused by the absence of immune cells from the thymus gland.\textsuperscript{66} Although the inherited immune defect is present at birth, patients often do not present to the health care system until later during infancy as a result of syndrome-associated, significant heart birth defects or generalized low blood calcium seizures from the absence of functioning parathyroid glands.\textsuperscript{67} The most common, and critical, presentation of DiGeorge’s Syndrome, however, relates to the affected individuals...
increased susceptibility to life-threatening, severe infections at an early age. Provided that a tissue-compatible match is available, treatment with bone-marrow transplantation from a sibling or parent may be curative. Otherwise, transplanted fetal thymus tissue offers the only other potentially successful, therapeutic alternative for this condition.

B. THE FETUS' TISSUES

By virtue of their inherent plasticity for adaptation, fetal tissues possess properties that are singularly amenable to medical transplantation research. Fetal cells grow rapidly outside their tissue of origin and are able to functionally integrate with most new "foreign" environments. Further, as a result of their decreased immunogenicity (tendency to induce rejection in the host), fetal cells likewise pose no substantial threat to the host recipient's protective responses against transplanted foreign (non-self) tissue. In spite of these intrinsic advantages, however, fetal tissue obtained from stillbirths, spontaneous abortions and ectopic pregnancies, although ethically justifiable, are frequently not suitable sources for successful transplantation.

As much as sixty percent of fetal tissue from these "acceptable" sources contain severe genetic defects as well as other parathyroid glands produce a hormone, parathormone, essential to the maintenance of normal blood calcium levels. Id.


70. E.g., Ryan, 65 CAL. L. REV. at 684-85 (commenting on the clinical course of twenty-seven patients with DiGeorge's syndrome over the preceding twenty years following receipt of fetal thymus tissue transplantation, nine with successful results).


73. E.g., Greely, Hamm, Johnson, Price, Weingarten & Raffin, 320 NEW ENG. J. MED. at 1093. Tissues that contain inherent properties of cellular immaturity, proliferation, adaptability and low immunogenicity are particularly useful and potentially effective in all forms of transplantation research. Adult tissues, in contrast, possess mostly fully developed, mature cells and thus, generally lack these desirable cellular characteristics. Given their highly specialized nature, transplanted adult cells cannot easily proliferate in or functionally adapt to any substantial change in their environment. Furthermore, by virtue of their cellular maturity, "adult" tissues commonly evoke an aggressive, immunodestructive defensive response in the host recipient.

74. See supra notes 9-11 and accompanying text.

75. See Childress, 1 KENNEDY INST. ETHICS J. at 97; Mahowald, Silver & Ratcheson, 17 HASTINGS CENTER REP. at 13.
transplantable, undesirable conditions which preclude their use for either medical therapy or scientific research. When combined with the indeterminate time delay between fetal death and the fetal tissue's expulsion from the pregnant woman, the high probability of pre-existing fetal pathology makes these permissible tissues unsatisfactory, futile sources for therapeutic transplantation. In marked contrast, fetal tissues derived from electively induced abortions generally involve healthy fetuses, result from scheduled, elective family planning procedures and yield a more abundant supply of viable fetal cells, attributes that emphasize the suitability of this tissue source for transplantation research. Unfortunately, it is this same emphasis on superior suitability for transplantation that prohibits any casual attempts at trivializing the relationship between induced abortions and fetal tissue research that employs abortuses from such elective pregnancy termination procedures.

IV. THE ETHICS OF FETAL TISSUE TRANSPLANTATION RESEARCH

A. The Moral Dilemma

A confining, abortion-dependent viewpoint inadmissibly taints fetal tissue transplantation research beyond social acceptability and precludes, by the inherent divisiveness of the issue, any effective discussion on its potential medical benefits. In spite of the scientific viability of using fetal tissue in transplantation research, its connection with induced abortions and the attached apprehension that such research will legitimize and encourage a greater incidence of elective feticides fuels the ongoing moral controversy and engenders a heated, emotionally polarized debate. Notwithstanding these misplaced in-


77. Fine, 18 Hastings Center Rep. at 5.

78. The presence of healthy fetal tissue both improves the chance of a successful engraftment and decreases the likelihood of transplanting an undesirable, harmful condition. Likewise, prior knowledge of the fetal tissue's availability allows for adequate preparation and scheduled handling of the transplantable cells thereby promoting their functional survival and subsequent propagation in the host recipient.

79. See supra notes 1-8 and accompanying text.

terests, the presently controlling and supportive legal precedents mandate that consideration of the substantial medical and scientific benefits to be obtained through fetal tissue transplantation should not be readily shrouded in a conceptual, abortion-based morass and thereby, negligently dispensed with. On the contrary, the potential to produce momentous health gains for individuals suffering from serious and often fatal diseases strongly advocates for an opposite, abortion-independent deliberation of the relevant ethical and legal issues surrounding transplantation research with fetal tissues.

The alleged immorality of the fetal tissue’s source should be kept clearly separate and apart from the ethical appropriateness of its eventual use in transplantation research. Legal acceptability of the latter does not depend or follow from the moral or ethical confirmation of the former; the two should not be integrally related as means and ends. The averred complicity of fetal tissue transplantation as an act that symbolically expresses approval of elective abortions is unfounded, especially in the absence of any material contribution to its practice. Failing causal connection, one event does not become a moral accomplice to another by seeking to achieve some benefit from the other, morally wrongful event over which the benefiting event has no control. By maintaining a clear understanding of the distinct concepts of tissue derivation and use, as well as an unambiguous separation in donor intent between the electively induced abortion and the later donation and transplantation of fetal tissue, an acceptable moral distance can be practically established between these two disparate procedures. A firmly incorporated, explicit differentiation between

81. See supra note 12 and accompanying text.
82. See supra notes 5-8 and accompanying text.
83. See infra Parts IV.B to IV.E.
84. Contra Burtchael, 11(2) IRB: REV. HUMAN SUBJECTS RESEARCH at 9-11. Father James Burtchael, a theologian consultant member of the original N.I.H. Committee, would maintain nonetheless, that research employing the remains of an electively aborted fetus is ethically compromised and in dissonance with public policy by its complicity with the abortions that supply the tissue. See also Panel, 2 BioLaw at U1301 (reporting Rabbi J. David Bleich’s dissenting opinion that federal funding of fetal tissue transplantation research would result in the moral harm of increasing instances of feticide).
85. See Freedman, 10(6) IRB: REV. HUMAN SUBJECTS’ RESEARCH at 3.
86. Compare supra note 84, with Freedman, 10(6) IRB: REV. HUMAN SUBJECTS’ RESEARCH at 3 (countering that without materially contributing to its origination, “one cannot be complicit in some misbehavior by approving it, or failing to sanction it, or failing to disassociate oneself from it after the fact”).
87. See National Bioethics Advisory Commission, Ethical Issues in Human Stem Cell Research: Executive Summary, available at http://bioethics.gov/execsumm.pdf 1, 4-7, 10 (September 1999) [hereafter NBAC]. The NBAC was established by President Clinton on October 1995. Among its defined functions, the NBAC provides advice and makes recommendations to the appropriate government entities regarding (1) “the appropriateness of departmental, agency, or other governmen-
the two events will thereby dissolve the taint imposed on the deriva-
tion of valuable, medically therapeutic benefits from human fetal tis-
sue obtained through elective abortions.88

The federal N.I.H. Revitalization Act acknowledges the critical
importance of maintaining a conspicuous separation between the deci-
sion to abort an unwanted fetus and the donation of fetal tissue for
transplantation that may follow.89 Recognizing the provocative ethical
components influencing the abortion decision, the N.I.H. Revitali-
zation Act, and its succeeding administrative regulations, outline
elaborate consent and documentation requirements aimed at cur-
tailing any possible influence from the consequent use of the extracted
fetal tissue for therapeutic transplantation on a woman's initial choice
to terminate the pregnancy.90 In spite of these already "in force" re-
strictions, additional statutory or regulatory checks are claimed to
still be necessary to prevent not only the categorically unacceptable
slippery slope extension of transplantation research to comprise tissue
origination from living, viable fetuses but also the even more undesir-
able financial commercialization of fetal tissue.91 Unfortunately, a
persistent detriment to the successful evolution and widespread societal acceptance of these potentially therapeutic transplantation tech-
niques is the prevalent morality that the compelling ethical imperative controlling fetal tissue research is to refrain, under all circum-
stances, from any course of action that will collaborate in the elec-
tive destruction of a fetus.92

B. AUTONOMY

1. The Woman's Decision

Scientific progress and the need for new therapeutic medical dis-
coversies, irrespective of how desirable, are not sufficient grounds for
exploiting one person for another's benefit.93 Similarly, non-consen-
tal programs, policies, assignments, missions, guidelines, and regulations as they relate

to bioethical issues arising from research on human biology and behavior; and (2) applica-
tions, including the clinical applications, of that research." NBAC, available at http://
bioethics.gov/execsumm.pdf, at pmbl.

89. 42 U.S.C. §§ 289g-1(b)(2) to 289g-2(b) (1994).
91. Mahowald, Silver & Ratcheson, 17 HASTINGS CENTER REP. at 15. See Ryan, 65
CAL. L. REV. at 683-88 (cautioning that as valid treatments with fetal tissue transplan-
tation for various illnesses are established, a supply problem could become an incentive
for commercial exploitation).
92. See Burtchael, 11(2) IRB: REV. HUMAN SUBJECTS RESEARCH at 10; Panel, 2 BIO-
LAW at U1301.
93. These concepts have long been established, and widely embraced, by the
world's community even though initially recorded in response to a variety of historical atrocities. See Nuremberg Code (1946), reprinted in GEORGE J. ANNAS, LEONARD H.
ual experimentation procedures are unequivocally unethical and constitute a direct invasion of a person's constitutional right of privacy from unjustified intrusion. Alternatively, notwithstanding these time-honored limitations, the surety of informed consent has long been recognized to transform a transplant situation from one in which a donee benefits from the donor's consensual exploitation into a permissible transaction in which the donor's autonomy is respected.

In spite of allegations to the contrary, however, restrictive government ideologies and random, sustaining judicial interference, continue to directly infringe on a woman's decision-making autonomy to consensually donate her fetus' tissues for medical research. A woman who chooses abortion as an operation of her constitutionally protected reproductive choice does not abdicate or become legally or morally disqualified from exercising her primary decision-making authority to give proxy consent as to the donation of her aborted fetus' tissues. In contrast, ascertaining that the mother voluntarily and without coercion consents to the fetal tissue transplantation serves to recognize,
respect and protect her moral autonomy to dispose of her dead fetus' remains.

Even though the Supreme Court has never held that an unborn fetus must be treated as a constitutional person under all pertinent circumstances, our legal system in general, with society's support, has long been willing to grant dead fetuses claim to the same dignified and respectful disposition of their cadaveric remains as any other dead person. Specifically, although jurisdictional, common law differences do exist, the closest relative or guardian commonly has primary, complete authority over the disposition of the fetal cadaver, subject only to the limiting doctrines that the public health not be endangered nor the public decency offended. Common law generally invests a quasi property, possessory interest in the dead body in favor of the decedent's next of kin. The right to control the disposition of the remains of a dead fetus vests first in the surviving parents. Moreover, this entitlement customarily lacks any specific stipulations that the applicable parents' interests be solely for the purpose of determining who shall have custody for burial.

Given the prevalent legal precedent, the mother as next of kin should have the legal authority to dispose of the fetal body and to object to the use of the remains in a manner not consistent with prevailing custom. The mother's decisional authority to dispose of the fetal remains demands deferential respect under the protective umbrella of the constitutional right of privacy and, as such, may not be unduly burdened without a compelling, narrowly tailored state interest. Absent the latter, broad fetal disposal regulations have previously been and should continue to be struck down, as they constitute
an indirect, chilling invasion on a woman's right to privacy.\textsuperscript{107} Analogously, unless rape or incest exists, the father's consent or objection to the use of the extracted fetal tissue for transplantation research accordingly deserves an equivalent respect.\textsuperscript{108}

2. The Fetal Interests

Therapeutic and non-therapeutic experimentation without a competent subject's consent is both unlawful and unethical, particularly if such transgression is harmful to the disregarded individual.\textsuperscript{109} Still, the "harmful" removal of organs from legally incompetent cadavers and their subsequent transplantation is presently permissible within our society provided that free and informed consent has been obtained either pre-death or post-mortem from the deceased's nearest next of kin.\textsuperscript{110} Unlike adults, however, fetuses are never in a position to express preferences, or to be coerced into an uninformed consent, as to whether or not their tissues should be salvaged for use in transplantation research.\textsuperscript{111} Lacking competence in the donors, consent for dona-
tion of fetal tissue for transplantation must therefore be made on the fetuses' behalf via appropriate proxies.\textsuperscript{112}

Deceased fetuses, like dead adults, do not have fundamental rights to be protected. A plenary, independent and constitutionally protected moral status for the non-viable, dead fetus has never been conceded by the state.\textsuperscript{113} In spite of a prevailing and, at times, compelling state interest in protecting potential life,\textsuperscript{114} there are no constitutional cadaveric interests to be protected or potential life to be preserved after the determination of fetal death. Thus, federal statutes and administrative regulations banning research on aborted fetal tissues serve no rational purpose and will not protect the dead fetus' already non-existent, constitutional autonomy.\textsuperscript{115} Despite the lack of a decisional autonomy deserving of protection, aborted dead fetuses, nonetheless, still merit the same dignity and respect in the disposition of their remains afforded to all deceased children or adults.\textsuperscript{116}

3. The Physician's Rights

The Constitution's right of privacy in procreative decision-making was first validated by the Supreme Court's 1965 landmark ruling in \textit{Griswold v. Connecticut}.\textsuperscript{117} Subsequent Supreme Court holdings have expanded the protection afforded by the Constitution's right of privacy to include personal decisions in such other areas as marriage\textsuperscript{118} and abortion.\textsuperscript{119} The Court, however, has chosen to limit this privacy protection to only those activities that it considers as fundamental rights.\textsuperscript{120} Although physicians may be legally and morally obligated to treat viable abortion survivors,\textsuperscript{121} dictatorial regulations

\textsuperscript{112} See REVISED U.A.G.A. § 3(a)(3), 8A U.L.A. 40 (1987). See also Jones, 5 BIOETHICS at 40 (maintaining that there are instances, such as when persons are incapable of making an informed consent, where such consent has to be given by someone else on their behalf).

\textsuperscript{113} Margaret S. v. Treen, 597 F. Supp. 636, 675 (E.D. La. 1984), aff'd, Margaret S. v. Edwards, 794 F.2d 994 (5th Cir. 1986) (noting "[t]he State's interest in protecting fetal life does not continue past the death of the fetus."); Freedman, 10(6) IRB: REV. HUMAN SUBJECTS' RESEARCH at 2. See John A. Robertson, Rights, Symbolism, and Public Policy in Fetal Tissue Transplants, 18 HASTINGS CENTER REP. 5 (1988) (asserting that deceased persons or fetuses no longer have interests to be protected).

\textsuperscript{114} See supra note 92 and accompanying text.

\textsuperscript{115} Robertson, 66 WASH. U. L.Q. at 464, 481-82.

\textsuperscript{116} See supra notes 95-99 and accompanying text.

\textsuperscript{117} 381 U.S. 479 (1965) (recognizing the constitutionally protected privacy right of procreative choice in married couples).

\textsuperscript{118} Loving v. Virginia, 388 U.S. 1, 12 (1967).

\textsuperscript{119} Roe v. Wade, 410 U.S. 113 (1973).

\textsuperscript{120} E.g., Bowers v. Hardwick, 478 U.S. 186 (1986) (proclaiming that there is no fundamental right of personal privacy in homosexual relations).

\textsuperscript{121} In \textit{Planned Parenthood v. Ashcroft}, 462 U.S. 476 (1983), the Supreme Court upheld a State's statutory provision which mandated the presence of a second physician at an abortion procedure. The Court judged that physicians are legally obligated to
limiting medical researchers’ rights to engage in their profession would seem an unreasonable and impermissible incursion into their equally constitutionally protected right of autonomy.122 State laws should not infringe on a person’s right to pursue his occupation unless they satisfy a rational nexus to a legitimate state interest.123

Unlike narrowly tailored regulations, broadly sweeping denials of therapeutic medical research with electively aborted fetal tissues are not rationally connected to the state’s compelling interest in prohibiting the agreeably unethical commercialization of fetal tissue transplantation.124 So long as fetal tissue transplants are utilized solely for matters of medical benefit, such as treatment, education and regulated research, their supervised use should not be ethically objectionable. Similarly, the physician’s beneficial application of extracted fetal remains to the treatment of persons under his care with serious and often fatal diseases does not make him an accomplice in the allegedly wrongful, initiatory abortion procedure; the connection is too tenuous and speculative. In the absence of intolerable conflicts of interest such as a direct personal or financial advantage to the researcher from the proposed transplantation, implied images of research physicians as complicitous collaborators in a wrongful unethical act are both maligning and indefensible. Provided adherence to these vital standards exists, any statutory restriction imposed on potentially constructive fetal tissue transplant procedures would, therefore, serve only to interfere with the physician’s autonomy to engage in professional research.125 Since no state forbids the experimental use of treat, and that the State may choose to provide safeguards for preserving the life of a viable abortion survivor. Ashcroft, 462 U.S. at 482-86.

122. In his notable dissent to the majority’s holding in the 1872 Slaughter-House Cases, 83 U.S. (16 Wall.) 36 (1872), Justice Joseph P. Bradley first suggested the existence of this constitutionally protected right:

This right to choose one’s calling is an essential part of that liberty which it is the object of government to protect; and a calling, when chosen, is a man’s property and right. Liberty and property are not protected where these rights are arbitrarily assailed . . . . [A] law which prohibits a large class of citizens from adopting a lawful employment, or from following a lawful employment previously adopted, does deprive them of liberty as well as property, without due process of law.


125. Gelfand & Levin, 50 WASH. & LEE L. REV. at 681. See Robertson, 66 WASH. U. L.Q. at 482 (protesting that the singling out of aborted fetuses for an experimental ban,
human remains from victims of accidents or violent crimes, adherence to groundless distinctions against fetal tissue research is irrational; "there can be no plausible argument for valuing a dead, often pre-viable, fetus more than a regular corpse."126

C. BENEFICENCE AND NON-MALFEASANCE

Fetal tissue transplantation is ultimately for the medical benefit of the receiver. The therapeutic advantages possible from fetal tissue research may preserve life or, at the very least, alleviate great suffering in the gravely ill transplant recipients.127 To this extent, beneficence, as well as respect for the aborted fetus' worth, emanates not from the immediate disposal of the dead fetuses' remains, but rather from the substantial, subsequent gains conferred on others through the gift of their tissues.128 Within this context, the legitimacy of fetal tissue transplantation lies principally in its eventual health benefits to others.

In the present legal construct of the non-viable fetus as a constitutional non-person,129 the ethical tenets of preserving life and allaying pain clearly dictate that the potential good from fetal tissue transplantation research far outweighs the negligible harms.130 Further, even if the fetus's potential for human life were to mandate full constitutional protection, the preceding abortion-induced fetal demise would be, nevertheless, sufficient to comply with society's ethical precept of non-malfeasance. Given that the process of fetal tissue extraction is not causally related to the post-morten transplantation research procedure,131 the principle of "doing no harm" is therefore, appropriately satisfied under the circumstances. Within these listed guidelines, the dead fetus would thus be entitled to the same respectful and dignified treatment as a deceased child or adult but not more. Thus, absent any greater than minimal harm to the dead fetus, the enormous therapeutic improvements to be derived in another person's quality of life would balance in favor of and amply justify the legal adequacy of con-
sensual fetal tissue transplantation research under a best interest standard.\textsuperscript{132}

Fetal tissue transplantation research utilizes as therapy the remains from dead abortuses. Fetal tissue transplants depend upon the prior death of a fetus to enable a later good to serve others. In assessing the ethical and legal acceptability of fetal tissue transplantation, the dignity of the dead fetuses must be weighed against the lives, dignity and comfort of those sick patients seeking improved health from the results of therapeutic research. Balancing these factors, the ethical principles of medical beneficence and non-malfeasance compel the curing of disease and the relief of suffering. Respect for the health requirements of the living justly supercedes and thereby, need not conflict with, the relatively inconsequential interests of aborted dead fetuses.

D. RESPECT FOR HUMAN DIGNITY

Guardianship of the health and safety of all citizens is uniformly accepted as a valid exercise of a state's police power under the United States Constitution's Tenth Amendment.\textsuperscript{133} Similarly, the Supreme Court has firmly established that the state may lawfully choose to define strict safeguards for preserving the life of a viable abortion survivor.\textsuperscript{134} Alternatively, an individual's legal right to bury a corpse, or to otherwise preserve its remains, also commands considerable deference, and belongs exclusively to the next of kin absent testamentary disposition to the contrary.\textsuperscript{135} In the settings defined by these lawful confines, the state may rightly regulate the care and disposition of cadavers so as to not endanger the public health nor offend public decency.\textsuperscript{136} The state, however, does not otherwise possess any

\textsuperscript{132.} See Annas & Elias, 320 New Eng. J. Med. at 1081. See also Greely, Hamm, Johnson, Price, Weingarten & Raffin, 320 New Eng. J. Med. at 1093 (inferring that the merits of fetal tissue transplantation research lie in its beneficence in preserving and improving the lives of others).
\textsuperscript{133.} See supra note 45 and accompanying text.
\textsuperscript{134.} See supra note 121 and accompanying text.
\textsuperscript{135.} See supra notes 100-21 and accompanying text.
\textsuperscript{136.} Prior to the development of refrigeration, public health concerns strongly favored the immediate burial of a corpse. The then prevalent conduct necessary to satisfy this public health standard was manifestly defined by the Kentucky Supreme Court in Seaton v. Commonwealth, 149 S.W. 871 (Ky. 1912):

The custom of the country imposed upon appellant only the duty of decently burying his child; that is, it must be properly clothed when being taken to the place of burial, and then laced in the ground or tomb, so that it will not become offensive or injurious to the lives of others. He may not cast it into the street, or into a running stream, or into a hole in the ground, or make any disposition of it that might be regarded as creating a nuisance, be offensive to the sense of decency, or be injurious to the health of the community.

Seaton, 149 S.W. at 873.
additional legitimate interest in affording dead fetuses a greater, separate and unequal, legal protection beyond that granted to deceased children and adults.\textsuperscript{137} As such, statutes broadly prohibiting transplantation research with dead aborted fetal tissues contain no rational link to presently “en-force” legal principles and are, therefore, both inapplicable to the preservation of life and disrespectful of the mother’s lawful right to dispose of her fetus’ remains.

Heeding these pertinent limitations, the state could fittingly dictate that fetal tissue transplantation research be only for matters of anticipated medical benefits, thereby precluding the potential subject of human abortuses to procedures considered inappropriate because of their undignified and disrespectful treatment of the fetus as a market commodity.\textsuperscript{138} Since the irreverent handling of any corpse is perceived as both offensive and obscene, narrowly tailored regulations for preserving the dignity of the dead fetus are appropriate State’s interests worthy of support.\textsuperscript{139} However, even though aborted fetuses deserve dignity and respect, this appreciation is not evidenced solely by the immediate disposal of their tissues. The desired dignified and respectful treatment of fetal cadavers will more likely issue from the scientific progress and therapeutic effectiveness achieved through the dedication of the extracted fetal tissues to transplantation research rather than into the ground.\textsuperscript{140}

E. DISTRIBUTIVE JUSTICE\textsuperscript{141}

Statutory bans on fetal tissue transplantation research serve no valid societal purpose or government interest by singling out the

\textsuperscript{137} Treen, 597 F. Supp. at 675. See State v. Powell, 497 So. 2d 1188, 1195-96 (Fla. 1986) (Shaw, J., dissenting) (arguing for the presence of a fundamental privacy right in the next of kin to control the disposition of cadaveric fetal remains qualifiable only by a state’s police power to regulate the care and handling of dead bodies so as to protect the public health and welfare).

\textsuperscript{138} Childress, 1 KENNEDY INST. ETHICS J. at 98. See Robertson, 18 HASTINGS CENTER REP. at 10 (noting that the commercial buying and selling of fetal tissue is perceived by society as damaging to the fetus’ dignity).

\textsuperscript{139} See Childress, 1 KENNEDY INST. ETHICS J. at 112 (“Respectful and dignified treatment and disposal of cadaveric remains is required, in part to prevent offense to the living.”). Cf. Bregman, 36 U.C.L.A. L. REV. at 1201-02 (stating that the treatment of human embryos as property, such as the market exchange or bartering of fetal tissue for restored life, undermines their dignity).

\textsuperscript{140} See supra notes 127-32 and accompanying text.

\textsuperscript{141} Whereas the bioethics principle of distributive justice has been commonly applied to issues pertaining to inequalities in access to health care and its limited resources, its sphere of influence need not be so restricted. Undoubtedly, the application of this general notion in medical bioethics includes the fair and equitable distribution of health care resources, preferably on the basis of greatest need. Distributive justice, however, additionally embraces the just allotment of benefits and burdens among health care participants; such distribution being determined by the aggregate risks, costs and potential gains of each of the alternative recipients. See
aborted dead fetus for disparate legal protection.\textsuperscript{142} Deceased fetuses no longer have interests to be guarded from injury.\textsuperscript{143} In marked contrast, baseless prohibitions on medical fetal tissue research may actually deprive a terminally ill transplantation recipient of life as is expressly guaranteed by the Fourteenth Amendment of the Constitution.\textsuperscript{144} Moreover, the proscription of fetal tissue transplants may likewise interfere with the potential donees’ right to medical care.\textsuperscript{145}

Even though a person’s interest in receiving medical treatment has not yet been given explicit constitutional protection,\textsuperscript{146} the right of privacy encompasses the freedom from all substantial, arbitrary government impositions and purposeless restraints.\textsuperscript{147} Within this legal framework, ever since the original 1891 Supreme Court privacy decision in \textit{Union Pacific Railway v. Botsford},\textsuperscript{148} the right of personal freedom has been consistently recognized as one aspect of the broader liberty interest secured by the substantive Due Process Clause of the Constitution’s Fourteenth Amendment.\textsuperscript{149}

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\textit{generally Tom L. Beauchamp \& James F. Childress, Principles of Biomedical Ethics, 326-94 (Oxford Univ. Press, 4th ed. 1994) (analyzing the principles of justice as it relates to the health care system). Injustice under this concept of bioethics would therefore involve not only wrongful acts that provide unequal access to available health care, but also those distributive decisions that both deny people benefits to which they are entitled and which fail to apportion the associated burdens justly. Beauchamp \& Childress, supra note 141, at 326-94. It is within Beauchamp and Childress’ framework that we presently explore the relationship between fetal tissue transplantation research and the distributive justice principle of bioethics.}
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142. \textit{See supra} notes 91-92, 95-96, 108 and accompanying text (discussing the unacceptable effects of fetal disposal regulations on the woman’s constitutional right to privacy).
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143. \textit{See supra} notes 101, 110 and accompanying text.
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144. \textit{U.S. Const. amend. XIV, § 1} (providing “nor shall any State deprive any person of life, liberty, or property, without due process of law”). \textit{See Lafferty \& Furer, 27 Suffolk U. L. Rev. at 1247} (arguing that denying researchers federal funds crucial for fetal tissue transplantation research shows disrespect for \textit{existing life}). \textit{See also Slaughter-House Cases, 83 U.S. (16 Wall.) at 116} (Bradley, J., dissenting) (noting “[r]ights to life, liberty, and the pursuit of happiness . . . are the fundamental rights which can only be taken away by due process of law, and which can only be interfered with, or the enjoyment of which can only be modified, by \textit{lawful regulations} necessary or proper for the mutual good of all; . . .”) (emphasis added).
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146. Robertson, 66 Wash. U. L.Q. at 484. \textit{But see} Ballard v. Andrews, 498 F. Supp. 1038, 1048 (S.D. Tex. 1980) (holding that the decision to obtain, or reject, medical treatment is a constitutional right encompassed by the right of privacy).
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147. \textit{Union Pacific Ry. v. Botsford, 141 U.S. 250, 251 (1891)} (noting “[n]o right is held more sacred, or is more carefully guarded, by the common law, than the right of every individual to the possession and control of his own person, free from all restraint or interference of others, unless by clear and unquestionable authority of law . . . to be let alone”). \textit{See also supra} notes 84-88, 105-07 and accompanying text.
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148. \textit{Botsford, 141 U.S. at 251}.
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149. \textit{Id}.
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Implicit in all of the Supreme Court's subsequent privacy holdings has been the attestation that those choices protected from arbitrary government restraint or interference under the fundamental right of individual freedom must be both personal and important.\textsuperscript{150} Decisions to obtain or reject medical treatment indubitably meet these criteria.\textsuperscript{151} Health care decisions are intrinsically personal and the importance of one's health simply cannot be overstated.\textsuperscript{152} Accordingly, although the right of privacy is not absolute,\textsuperscript{153} any governmental infringement upon this right needs to be tested under a strict scrutiny standard of judicial review.\textsuperscript{154} Absent a compelling interest and narrowly tailored regulations drawn to express such interest, the state cannot permissibly burden the sick patient's right to life and liberty by obstructing his access to the health benefits derived from medical research with fetal tissue transplantation.\textsuperscript{155} To justify the state's intrusion into an ill patient's potentially substantial gains from fetal tissue transplantation research, the state must disclose a more compelling purpose than simply demonstrating respect for the dead fetus or preventing a speculative increase in the number of induced abortions.\textsuperscript{156} Without legitimate, contrary justifications for disparately protecting the dead fetus beyond other human cadavers, the constitutional guarantees of life, liberty and the pursuit of happiness should clearly balance the distributive justice scales in favor of the sick patient's right to receive effectual medical therapy through fetal tissue transplantation.

\textsuperscript{151} Andrews, 498 F. Supp. at 1046-47.
\textsuperscript{152} Id.
\textsuperscript{153} See supra notes 120, 123 and accompanying text (preserving the exemption that the right of privacy may be overcome by a compelling state interest which is narrowly drawn to express only that interest).
\textsuperscript{154} Griswold, 381 U.S. at 485 (establishing strict scrutiny judicial review for state regulations infringing on a constitutionally protected fundamental right). In a concurring opinion, Justice Goldberg further expounded on the majority's holding in Griswold by declaring that when there is a significant encroachment upon personal liberty, the State may not prevail simply on a showing that a regulatory statute has some rational relationship to the effectuation of a proper government purpose; rather, the State may succeed only by demonstrating an interest which is compelling and that the statute at issue is necessary to its accomplishment. Id. at 497.
\textsuperscript{155} See Robertson, 66 WASH. U. L.Q. at 485. See also Andrews, 498 F. Supp. at 1045 n.24 (declaring that the constitutional right to obtaining medical treatment remains unchallenged and undiminished). Cf. Treen, 597 F. Supp. at 673 (pointing out that a state enforced prohibition on aborted fetal tissue experimentation could deprive the parents of potential, research-derived information necessary to make an informed future conception or pregnancy termination decision).
\textsuperscript{156} Robertson, 66 WASH. U. L.Q. at 490.
V. CONCLUSION

As discussed throughout the text of this manuscript, society has already decided that the experimental or therapeutic, consensual use of cadavers, their organs or tissues is neither disrespectful nor morally unacceptable. Therefore, the only crucial topic still remaining in the lingering national debate on the adequacy of fetal tissue transplantation is whether this novel, therapeutic medical procedure encourages the incidence of induced abortions.

This controversial issue and its attendant tensions, however, were extensively considered and explicitly dismissed as early as 1988 by the then-administration-mandated, N.I.H. advisory committee of experts, the Fetal Tissue Transplantation Research Panel ("Panel"). By way of their offered summative findings, the Panel established distinct and unambiguous, alternative operative concepts for determining the ethical acceptability of research with transplanted fetal tissues. In their summary to the Assistant Secretary of Health and Human Services, the Panel expressly stated that: "since abortion is legal and transplantation research is intended to achieve significant medical goals, the use of tissue from induced abortions is 'acceptable public policy'..." The Panel further addressed the Secretary's unsubstantiated concerns with the research's potential for inducing excess feticides by concluding that, in light of the total array of factors that lead a woman to terminate her pregnancy, the fact that fetal remains will be subsequently donated is highly unlikely to contribute significantly to the rate of elective abortions. Additionally, in response to the argument that, given the possibility of benefiting others through transplant of her fetus' tissues, a woman's intrinsic benevolence would encourage her choice to abort, the Panel correspondingly asserted that "safeguards can be applied to minimize any possible encouragement for abortion...; requests to donate tissue should be separate from consent to the abortion and no fees should be paid to the donor or clinic for procurement of fetal tissue..." As

157. See supra Parts II.B, IV.B.2 and IV.D.
158. Panel, 2 BIOLAW at U1299.
159. Id. See supra notes 15-17 and accompanying text.
161. Id. (providing "[t]here is no evidence that use of fetal tissue for research has affected decisions regarding abortion...; the process for obtaining informed consent from a pregnant woman for a donation of fetal tissue for research does not constitute an inducement to abortion...").
162. Id. See Childress, 1 KENNEDY INST. ETHICS J. at 106-07. In his article, Childress distinguishes specific benevolence (woman becoming pregnant in order to abort and donate fetal tissue to a specific family member) from general benevolence (aborting to donate fetal tissue to benefit unrelated and unknown patients) in the strength of their respective effects in promoting induced abortions.
specifically suggested in the Panel's summative report, important among these safeguards is the prohibition of financial incentives for fetal tissue donation as well as the imposition of substantial penalties for the provision or receipt thereof. The N.I.H.'s advisory committee of experts similarly recommended that, unlike the Revised U.A.G.A.'s provisions to the contrary, deliberate federal regulations forbidding directed donations are resolutely necessary to prevent the commercial exploitation of therapeutic fetal tissue transplantation procedures.

So long as the legal system continues to grant and protect a woman's constitutional choice to abort her non-viable fetus, the ethical and moral controversies encircling the abortion debate have no standing in the decision to legalize and support fetal tissue transplantation research. Ethical concerns related to the preservation of potential human life are not at issue in the decision to donate extracted fetal remains for therapeutic medical research. The Supreme Court verified legalization of elective abortions thus prohibits the application of this preceding and separate event as a restricting moral obstacle to the utilization of transplanted fetal tissues for alleviating the otherwise incurable suffering in gravely ill patients.

The tissue's abortion source is merely a tangential, politically contaminated Gordian knot that need not entangle the long practiced and widely upheld principal purpose for pursuing any medical research; that is, the potential benefits to others to be gained by the process. Even if electively induced abortions are considered tragic, society's uneasiness with these procedures cannot cancel its obligations to those afflicted who can most benefit from transplanted fetal tissues. As such, abortion-based, limiting ethical and legal concerns must not, by themselves, bar research with fetal tissues as a potentially effective therapy for the transplant recipient's seriously restrictive and potentially fatal illness. Absent a persuasive, complicity-centered argument, society and the government as its representative must, therefore, evaluate the legitimacy of fetal tissue transplantation strictly on the basis of its own unique merits.

In establishing regulatory federal and state policy, the substantial health gains from fetal tissue transplantation research need to be
balanced solely against the immaterial risks of harm to the dead fetus. Lacking objective support, concerns with risks of excess feticides are in effect, baseless. Under this appropriately narrowed analysis, fetal tissue transplantation must be endorsed on the basis of the derived, considerable medical benefits to the transplant recipients and the general public's best interest.\textsuperscript{172} Provided that uncoerced, informed consent from the legally-vested next of kin is obtained for fetal tissue transplantation research\textsuperscript{173} and that the requisite procedural and disclosure standards are adhered to,\textsuperscript{174} whether or not the fetal cadaver comes into actuality as the result of an alleged "moral murder" is irrelevant and indeterminate. Legal and moral concerns pertaining to reproductive rights and the protection of potential human life are not decisive in ascertaining the legal and ethical acceptability of research with previously extracted fetal tissue as transplant therapy for serious illnesses. So long as appropriate consent is secured and regulatory standards are in place to ensure that the practice prohibits directed donations and that it remains free of inappropriate inducements and all commercial interests, the highest standards of scientific and ethical responsibility will be met and maintained.

When a pregnancy is terminated lawfully it is with the consent of the woman involved. Once terminated, the remaining question as to the dead fetus is not whether the antecedent, induced fetal demise should be challenged! Rather, the relevant question is whether the scientific merits and substantial therapeutic health promises of the proposed fetal tissue transplantation research justify federal funding and societal support. Under this conceptual approach, fetal tissue transplantation research determines only how the tissue remains are disposed of, not whether their extraction should have occurred. "Should the fetal tissue be used where there is a potential for clinical benefit, or should it be destroyed? . . . [T]he ethical imperative is to use the tissue."\textsuperscript{175}

\textsuperscript{172} See supra note 146 and accompanying text. See also supra Part IV and accompanying text.

\textsuperscript{173} See supra notes 34-37, 48, 101-08 and accompanying text.

\textsuperscript{174} See supra notes 34-37, 47-49 and accompanying text.

\textsuperscript{175} Lafferty & Furer, 27 Suffolk U. L. Rev. at 1248 (emphasis added).