

# Eugenics: The Ethical Dilemma of Reproductive Technology

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## The Eugenics movement in the early 1900's<sup>1</sup>

The term eugenics, which refers to the science of heredity and good breeding, was used as early as 1883. It was championed by the prominent biologist Charles Davenport who concluded that certain “racial stock” was superior to others in traits such as intelligence, hard work, and cleanliness. In the early 1900’s, however, public opinion and social organization, including religion, law, politics, medicine, and the media were opposed to the idea and to the practice of birth control.

In 1917 Margaret Sanger founded the *Birth Control Review* with the theme of eugenics, liberalized sexuality, birth control, population control, and planned reproduction as prominent issues<sup>2</sup>. Sanger formed the American Birth Control League in 1926 to lobby members of Congress to introduce a bill to amend the 1873 *Comstock Law* which classified the use, importation, or mailing of drugs, devices, and articles that prevented conception or caused abortion to be criminal.

Eugenic societies sprang up in the United States after World War I. The American Eugenics Society was formed in 1923 and soon there were 29 chapters around the country. As is done in county fairs now for prize animals and plants, competitions and blue ribbons were sponsored by eugenicists for “fitter family” and “better baby”. When the horrors of state sponsored eugenics were revealed after World War II as developed by the Nazi regime the eugenics craze was dropped as a movement.

## Concerns over Biomedicine

In 1974 Charles Frankel published an article entitled “The Specter of Eugenics”. He contended, “a new theme has emerged to dominate the discussion of the moral

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<sup>1</sup> People and Discoveries: A Science Odyssey. “Eugenics movement reaches its height -1923” <http://www.phb.org/wgbh/aso/databank/entries/dh23eu.html> (8/25/04)

and social responsibilities of medicine. It is not how to humanize medicine but how to re-engineer the human race.”<sup>3</sup> He sounded the alarm that “biomedicine, a package of dazzling biological discoveries and new medical techniques,...is the harbinger, or portent, of the day when man will be able to say of himself...that , at last, he is his own greatest creation, and has got the weight of that other Creation off his back.”<sup>4</sup> Frankel noted trends in society that favor an easy transition to the growing interest in re-engineering the human race. These included concerns about population, decline of legal and moral support of marriage and family, acceptance of abortion, increased life expectancy, and growing costs of supporting the old, sick, poor and handicapped. He cautioned that biomedicine has a hidden agenda that “reawakens the impulse to regulate and control, to suppress the unplanned, the random, the offbeat”<sup>5</sup>

## Concerns About Goals

Thirty years after Frankel expressed his concerns, Dr. Leon Kass, Chairman of The President’s Council on Bioethics, presented his paper ,”Beyond Therapy: Biotechnology and the Pursuit of Human Improvement”, to the Council which was formed in 2001 by executive order. After toasting the blessings of the golden age of biotechnology in regard to its potential for curing disease, prolonging life, and relieving suffering, Kass acknowledged the anxiety and concern prevalent among many people who wonder where biotechnology may be taking us. Raising questions about the ends and goals of the biomedical enterprise, Kass expressed concern that the bio-engineered wave of the future has the power to “sweep us up and tow us under”<sup>6</sup> New technologies give us powers over the human lifecycle both at its beginning and its end through the ability to prevent fertility or promote it, to select

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<sup>2</sup> Marshall, Robert G. and Chuck A Donovan. “How Planned Parenthood duped America.” Citizen. Vol. 6 No.1 (Jan 20) 1992:1-6.

<sup>3</sup> Frankel, Charles. “The Specter of Eugenics”. Commentary magazine. March 1974:25.

<sup>4</sup> Ibid.

<sup>5</sup> Ibid:30.

<sup>6</sup> Kass, Leon R. M.D. “Beyond Therapy: Biotechnology and the Pursuit of Human Improvement”, The President’s Council on Bio-ethics. January 2003.<http://www.bioethics.gov/background/kasspaper.html>.:4. (1/10/05)

or reject genetic criteria, to enhance muscle and mental performance, to replace body parts and to prolong life expectancy. Along with these powers come the threat of dehumanization and the potential of super-humanization. Kass expressed concern about “usurping God-like powers, but doing so in the absence of God-like knowledge.”...”The human body and mind, highly complex and delicately balanced as a result of eons of gradual and exacting evolution, are almost certainly at risk from any ill-considered attempt at ‘improvement.’ There is not only the matter of unintended consequences...but also the question about the unqualified goodness of our goals.”<sup>7</sup>

## **Concerns About Health, Equality and Liberty<sup>8</sup>**

**Objections and concerns about biotechnology relate to the American values of health, equality and liberty.** Health issues relate to safety and bodily harm. How safe are the newly developed drugs and reproductive technologies for bodily health? Drugs used to enhance muscle and mental performance for purposes of self-perfection will not be entirely safe, as indicated by recent revelation of athletes and their use of such drugs. “Anything powerful enough to enhance system A is likely to be powerful enough to harm system B”.<sup>9</sup> What are the health dangers involved in fertility treatment, in-vitro fertilization, cloning , and artificial insemination?

**Equality and fairness of distribution are additional concerns.** Those who are able to obtain the benefits of enhanced physical and reproductive performance will have unfair advantage over those unable to obtain them. Disparities will develop between those who obtain biotechnical enhancements and those who don’t. Money will in many cases be a determining factor which decides who will obtain benefits.

**Questions in regard to liberty, freedom and coercion are paramount.**  
**Biotechnology opens the door for power to be exercised by some over others for**

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<sup>7</sup> Ibid: 12.

<sup>8</sup> Ibid:8-12

<sup>9</sup> Ibid.:8.

**social control or personal enhancement.** The question of concern is who will be making decisions for others. Pre-implantation genetic diagnosis (PGD) allows parents to know and select the sex of their unborn child. When parents are able to select (or reject) the sex and genetic characteristics of their future child, questions may be raised in regard to the child's independence, personal integrity, well being, and individuality. With the possibility to know beforehand the health of embryos in regard to a number of diseases, medical pressure and peer pressure may work to coerce or require the rejection of that being. Failure to do so may become interpreted as child abuse. Because everyone is imperfect in one or another way, this possibility raises the question about the attitude of respect and dignity directed toward all people, particularly those seen as disabled or unfavored.

Another ethical concern develops when parents (or social planners) deliberately choose to develop a child or children with particular disabilities that they consider useful. A lesbian couple in Bethesda, Maryland, Sharon Duchesneau and Candace McCullough, recently gave birth to two children, now ages 2 and 7, who were 'planned' to be deaf because both of their mothers are deaf. Duchesneau and McCullough see their impairment as a 'cultural identity' rather than a disability.<sup>10</sup>

## **Concerns about Control**

The reproduction of the human race has traditionally been in the hands of individual men and woman who create new life and provide for their offspring in caring family settings. The development of biotechnology has refocused reproduction. Molecular biologists across the country are now in control of the knowledge and power to re-shape and control the world of life itself. The new reproductive technologies create the opportunity for a handful of people to manipulate and change life.

In 1977 Jeremy Rifkin and Ted Howard, in their book, *Who Should Play God: The Artificial Creation of Life and What It Means For the Future of the Human Race*, warned about the intentions of some researchers in regard to social reproduction.

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<sup>10</sup> Dial, Karla. "Perversion of choice: Homosexual couple designs two babies to be deaf like them". Citizen magazine. No. 16, Vol. 7 (July,2002):5.

Bentley Glass, the former president of the American Academy for the Advancement of Science, is quoted as saying, "In an overpopulated world, it can no longer be affirmed that the right of the woman and man to reproduce as they see fit is inviolate"<sup>11</sup> Joshua Lederberg, a Nobel Prize winning biologist proposes human cloning. He states "If a superior individual – and presumably, genotype – is identified, why not copy it directly, rather than suffer all the risks, including those of sex determination, involved in the disruptions of recombination (sexual procreation)"<sup>12</sup>." Joseph Fletcher, professor of medical ethics at the University of Virginia School of Medicine, considers test tube life as being the completion of the work begun by contraception. He sees laboratory-created life as "willed, chosen, purposed, and controlled rather than emotionally or accidentally produced"<sup>13</sup>."

The sexual freedom movements and the woman's liberation movements have contributed to the use of reproductive technology by creating an increase in infertility. Women who postpone childbearing for education and career suffer naturally a decline in fertility with age. Women who have sex with multiple partners often suffer from untreated sexually transmitted diseases that cause damage to reproductive organs. At the end of the millennium, Dr. Robert T. Francoeur, professor of human sexuality and embryology, noted that about 25 percent of women between twenty and thirty-five years of age were infertile<sup>14</sup>.

The movements away from traditional marriage toward the normalization of homosexuality and the increase in social acceptance of childbirth outside of marriage have also opened the door for the creation of children through reproductive technology. Reproduction has become industrialized and commercialized through the buying and selling of egg and sperm and the creation of offspring in the laboratory.

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<sup>11</sup> Rifkin, Jeremy and Ted Howard. "Who Should Play God?" In Social Institutions. Unit 4:301

<sup>12</sup> Ibid:302

<sup>13</sup> Ibid.

## **Concerns About Procedures of Reproductive Technology**

### **Artificial Insemination**

**Artificial Insemination (AI)** was the technology available to help couples who experienced male infertility prior to the late 1970's. Most sperm donors were medical students who could earn \$50 a donation. With no legal regulations, most AI practitioners placed few limits on how many times sperm donors could contribute. Women who received sperm donations were given little information about the donor of the sperm. Generally there was little screening of the donors nor were thorough records maintained.<sup>15</sup> A tragic case of deception was revealed when Dr. Cecil Jacobson was prosecuted in 1992 after DNA testing revealed that fifteen and possibly up to seventy-five children born to his patients were conceived using his own sperm.<sup>16</sup>

In 1982 the Sperm Bank of California was created to provide sperm to unmarried and heterosexual singles and lesbian women. The sperm, delivered to their door in a liquid nitrogen tank, could then be taken to their doctor for insertion, or they could do it themselves with a turkey baster.<sup>17</sup> Frozen sperm from a sperm bank generally cost \$200-\$400 per service, not including the cost of insemination.<sup>18</sup>

In 1988 the American Society for Reproductive Medicine set a policy to use only frozen sperm. This decision led to a proliferation of commercial sperm banks where would be consumer parents could select donors. Gay Becker, in her study of infertility treatments for women notes, “Because consumers can now select donors directly and persistently choose donors for intelligence and appearance, not only are donor gametes now highly commodified, but the manner in which they are being used suggests that a new form of eugenics is emerging.”<sup>19</sup>

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<sup>14</sup> Andrews, Lori B. *The Clone Age: Adventures in the New World of Reproductive Technology*. NY: An Owl Book/Henry Holt & Co. 1999:18.

<sup>15</sup> Ibid:80-82.

<sup>16</sup> Ibid:78.

<sup>17</sup> Ibid:87

<sup>18</sup> Becker, Gay. *The Elusive Embryo: How Women and Men Approach New Reproductive Technologies*. Berkeley, CA: University of California Press. 2000:259

<sup>19</sup> Ibid:245.

## In-Vitro Fertilization (IVF)

The IVF process opened the door to many reproductive possibilities of manipulation. . Lori Andrews, a professor of law, the director of the Institute for Science, Law, and Technology, and an advisor on genetic and reproductive technology to health organizations and governments, cautioned, “Once the embryo was isolated in the petri dish, it could be used to create a child for the progenitors, it could be donated to another couple, it could be genetically manipulated, or it could be used for other research purposes.”<sup>20</sup>

In her book, *The Clone Age: Adventures in the New World of Reproductive Technology*, Andrews reports, “Columbia-Presbyterian Medical Center in Manhattan will customize an embryo by choosing both an egg donor and sperm donor to match the desires of the parent. The clinic, run by Mark Sauer, allows couples to ‘adopt’ an embryo for \$2,725. The embryos are made from the surplus of donated eggs from women who have undergone fertility treatment for themselves, and from sperm donated to the clinic.”<sup>21</sup>

The first in-vitro fertilization baby was born in England in 1979. In 1980 Carol Pavek became a surrogate mother for a California couple, opening the possibility of buying an embryo and hiring a surrogate to carry it to term.<sup>22</sup> Egg donation became a commercial enterprise in 1984 when women began ‘donating eggs’. At first, women were paid \$250, but the price soon rose to \$1,500 or more, depending on the market value of the person offering the eggs.<sup>23</sup> The freezing of sperm, eggs, and embryo offered the opportunity to place reproductive tissue in storage for use at a later time. The first baby born from a frozen embryo was delivered in an Australian clinic in 1984. By the end of the millennium, there were over 100,000 frozen embryos held in storage in clinics of reproductive technology in the U.S..<sup>24</sup>

In-vitro fertilization involves the woman in months and even years of anxiety and medical treatments to prepare her for pregnancy. Although all pregnancies

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<sup>20</sup> Andrews, Lori, 1999:29.

<sup>21</sup> Ibid: 136.

<sup>22</sup> Ibid: 103.

<sup>23</sup> Ibid: 95

<sup>24</sup> Ibid: 67

**carry a degree of risk, IVF pregnancies have “increased risk for ectopic pregnancy, preterm labor, multiple gestation, and infants small for their gestational age.”<sup>25</sup>**

**It is common to transfer four embryos into the uterus at one time in hopes that at least one will be successful. IVF is responsible for 1 percent of the total births in the United States but it relates to 22 percent of triplet births.<sup>26</sup> In addition to medical risks, the IVF process includes “severe emotional stress for individual partners and for the relationship, a heavy financial burden, and the potential for multiple births, which in turn carry their own medical, emotional, and financial risks.”<sup>27</sup>**

## **Cloning**

**Cloning produces an exact duplicate of an organism. Although cloning also shows possibilities of use in finding cures for diseases, many concerns were raised about its prospect. Lisa Cahill, a Roman Catholic moral theologian, argued “that the child who is truly the child of a single parent is a genuine revolution in human history, and his or her advent should be viewed with immense caution.” She argued that the kinship network is important to social cooperation and the development of the sense of self. Cloning humans would not only liberate people from male-female relationships but would also “allow for the emancipation of human reproduction from any relationship.<sup>28</sup>” Although 85 percent of Americans support a ban on cloning , others push ahead to promote cloning as an option. Dr. Panayiotis Zavos, a University of Kentucky professor who runs a fertility clinic in Lexington, claimed he would produce a child for an infertile couple who has sought his help. He said that over “5,000 couples were willing to pay an estimated \$80,000 for the procedure.”<sup>29</sup>**

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<sup>25</sup> Becker, Gay. 2000:92

<sup>26</sup> Ibid:263.

<sup>27</sup> Ibid:97.

<sup>28</sup> National Bio-ethics Advisory Commission. “Religious perspectives.: In: Clones and Clones: Facts and Fantasies about Human Cloning. Martha C. Nussbaum and Cass R. Sunstein (eds.) NY: W.W Norton & Co. 1998:173-174.

<sup>29</sup> “Cloning’s mad scientist”. World magazine. Vol. 17, No. 32. August 24, 2002:23.

## **Stem Cell Research**

**Research on stem cells filled the news in late 1998 when scientists isolated and cultured stem cells from human embryos. Embryonic stem cells are the earliest cells from which body organs are developed and have the ability to grow into the 210 types of tissue in the human body. Stem cells hold potential for treating conditions such as heart disease, cancer, and diabetes. However, stem cells are derived from embryos three to five days past conception so the use for research purposes is opposed by those who consider the fertilized egg to be a potential human with full human rights. Michael Kinsley discusses what he calls the false controversy of stem cells. “Some stem-cell enthusiasts think that even antiabortion absolutists can support stem-cell research, since it uses surplus embryos that are doomed anyhow. But that logic would justify Nazi experiments on doomed Jews in the concentration camps. If the microscopic dot is a human being with full human rights, the answer is easy: no stem-cell research.”<sup>30</sup> How far this last statement is from the words of Francis Crick who along with his friend James Watson broke the genetic code in 1953 by building the double helix model of deoxyribonucleic acid (DNA). Crick believes that “no newborn infant should be declared human until it has passed certain tests regarding its genetic endowment, and that if it fails these tests it forfeits the right to live.”<sup>31</sup>”**

## **The Commodification of Reproduction**

**In just a few decades, the commercial operation of reproductive technology became a lucrative business with few controls governing its practice. By the late 1990’s the industry drew annual revenues of 2 billion dollars serving the 1 in 6 American couples who sought help for infertility problems. Annually about 60,000 births resulted from sperm donor insemination, 15,000 from in-vitro fertilization,**

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<sup>30</sup> Kinsley, Michael. “The False Controversy of Stem Cells.” Time magazine. Vol. 163, No. 22 (May 31, 2004:88.

<sup>31</sup> Frankel, Charles, 1974: 33.

and 1,000 from surrogate motherhood arrangements<sup>32</sup>. The buying and selling of sperm, egg and embryos became big business with few controls.

## **Summary: Concerns about Reproductive Technologies**

The author and advocate for client rights , Wesley J. Smith , stated. “Some bioethicists see themselves as the creator of a new moral paradigm that will replace the archaic Judeo-Christian order as the philosophical underpinning of society.”<sup>33</sup> As individual men and women use the new reproductive technologies they are “remaking nature, as they understand it. In doing so, they are creating a cultural shift in how people think about what is natural.”<sup>34</sup>

To summarize the concerns about changing patterns of reproductive behavior I quote the introduction to the chapter entitled “Reproductive Technologies Confront the Church” from my recently published book.

“The New World of reproductive technology presents many questions about the future of social, sexual, ethical, and family practices. Scientific developments raise questions that strain the shared cultural values of society. The science of reproductive technology continues to experiment with life in ways that will drastically and dramatically change the social, moral, and relationship variables of human life. Changes in behavior patterns challenge the ethical and legal systems to establish guidelines and laws to regulate the many concerns that arise and will continue to arise as new discoveries are made.”<sup>35</sup>

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<sup>32</sup> Andrews, Lori, 1999:220.

<sup>33</sup> Smith, Wesley J. “Is Bioethics Ethical?” The Weekly Standard Vol. 5., No. 28 (April 3, 2000) [http://www.weeklystandard.com/magazine/mag\\_5\\_28\\_00/smith\\_feat\\_5\\_28\\_000.html](http://www.weeklystandard.com/magazine/mag_5_28_00/smith_feat_5_28_000.html).

<sup>34</sup> Becker, Gay. 2000:239.

<sup>35</sup> Coppock, Marjorie L. *Wrestling With Angels: The Sexual Revolution Confronts the Church.* ACW Press, 2003:163.