

“Assisted Reproductive Technologies Are Anti-Woman”

By Marie Anderson, M.D., FACOG and John Bruchalski, M.D.

“Assisted reproductive technologies” (ART) broadly includes any therapy directed towards improving the chances of conception for an infertile couple. In 1978 one form of this technology made its debut when Louise Brown was born after her mother underwent IVF (in vitro fertilization). At the time, the scientific world marveled at man’s accomplishment in creating the first “test tube baby.” Now it seems more as if we have opened Pandora’s Box.

Initially it sounded simple to mix sperm and an egg in a Petri dish, but we now know it is far from simple. Many of the procedures are questionable, and many of the drugs used in these procedures put women’s health and lives in jeopardy. Without long-term studies, the risks to women and their children are unknown.

One in every 6 women of reproductive age will at some time in her life seek treatment for infertility.¹ The rates are rising as more women delay childbearing. Natural fertility drops after age 30; by 40 it plummets. By the 40s, chronic diseases such as endometriosis have had more time to progress to a stage that results in infertility. Other causes of infertility, such as ovarian cysts and tubal damage due to sexually transmitted diseases (STDs), are increasing at alarming rates as well.

As a result, women increasingly are turning to ART to have a child.² IVF is a \$2 billion a year business.³ More than 150,000 children have been born in the U.S. after their mothers underwent ART.⁴ But is this a prudent choice? IVF is largely privately funded and almost completely unregulated. The FDA (federal Food and Drug Administration) often approves drugs without long term data, and leaves to the physician’s judgment “off label” use of drugs to treat conditions for which they have not been approved. Since there is no regulatory agency to oversee the industry, women are treated as research subjects, given drugs that pose an unknown risk. Only later, many learn that their infertility had been due to a condition that will not respond to ovulation enhancers, such as poor sperm quality or a uterus that is structurally unable to carry a pregnancy. It has been said that a woman is under better supervision when she gets a tattoo than when she undergoes IVF.

Risks to women undergoing IVF procedures can be grouped into several categories: serious actions and side effects of fertility drugs; ectopic pregnancy; higher rates of pregnancy complications from carrying multiple fetuses, e.g., hemorrhage, hypertension, caesarean birth; and emotional and psychological problems due to high failure rates per attempt, high miscarriage rates and “selective reduction” of “excess” fetuses. Additionally, the risk for having a baby with birth defects is higher where children are conceived through ART. Also, the greater likelihood of twins and higher order multiples increases the risk of low birth weight babies, premature births, infant deaths and long-term disabilities.⁵ In 2002 alone, at least 12 studies and articles in peer-reviewed journals suggested a potential link between ART and birth defects, including heart defects, genetic diseases, childhood cancer, decreased cognition, and more. Clearly more long-term study is needed.⁶

Infertility Drug Risks

Infertility drugs that chemically manipulate a woman's body are a prime example of the confusion between experiment and therapy. The "workhorse" drug, Clomid, is often used to facilitate ovulation. Clomid is a derivative of DES (diethylstilbestrol). This estrogen was given to women for over 20 years to help prevent miscarriages, until it was discovered in the 1970's that it caused infertility in male offspring, as well as abnormalities in the woman's uterus which can make it impossible to successfully carry a pregnancy to term. Additionally, the daughters of women who have taken DES are at increased risk for a deadly type of vaginal cancer. Side effects of Clomid include mood swings, breast tenderness, bloating, stomach pain, severe dizziness and blurred vision.⁷ One percent of patients experience hyper-stimulation syndrome: rapid enlargement of the ovaries and excess fluid in the abdomen, lungs and pericardium. Ovarian rupture is likely, and this can cause life-threatening blood clots or hemorrhage. Hospitalization is usually required, and the condition can be fatal.

Perganol, human menopausal gonadotropin, consists of Follicle Stimulating Hormone and Luteinizing Hormone derived from the urine of menopausal women. It must be given by intramuscular injection, and daily ultrasounds and blood tests are required to monitor follicular development. The side effects are similar to those of Clomid, but more severe.⁸ Cycles can be disabling, and it can take months for a woman's body to clear the drug. Additionally, Perganol involves a higher risk (5%) of hyper-stimulation syndrome.⁹

In the early 1990s, two major studies linked such drugs to an increased risk for developing ovarian cancer.^{10, 11} A study in 2000 by the Cochrane Collaboration concluded that Clomid may increase ovarian cancer risk. The New England Journal of Medicine (August 2003) published two case reports concluding that a subgroup of patients is probably at increased risk due to ovulation stimulant therapies.

The journal Fertility and Sterility published an NIH study showing that the risk of breast cancer among women who took human gonadotropin drugs, such as Pergonal, for at least 6 cycles was two to three times that of women who had never used fertility medication.¹²

Lupron is a synthetic drug that suppresses the pituitary gland. Essentially, it creates a state of menopause. It suddenly and devastatingly drops the bottom out of a woman's hormonal milieu, giving her no time to adjust physiologically or psychologically. Women are miserable while taking this drug, experiencing hot flashes, depression and mood swings. Lupron is FDA-approved only for the pre-operative management of patients with fibroids and anemia, and for treatment of endometriosis. Both regimens are to be limited to 6 months' duration because of concerns about inducing osteoporosis.¹³ Despite these well-defined indications, physicians frequently use Lupron "off-label" to help time the release of eggs in IVF because it lessens the number of cancelled cycles (due to an insufficient or overabundant number of follicles that cycle), thus saving both money and time. Many women receive more than the recommended number of Lupron doses in their attempts to have a baby, and as a result many develop osteoporosis.

In March 2003 congressional testimony, registered nurse Lynne Millican recounted numerous examples of how she and other women, with no warning from fertility doctors, were seriously harmed by Lupron. Of her own experience she writes:

I began to experience a variety of ailments, was unable to work for 3 years, ... lost my job and home, and slowly came to the terrifying realization that I was in for the fight for my life while I had never felt sicker or had so many health problems. ... I audited my health records and compiled a chronological list. ... This sheet of paper represented: adenoma (tumor), breast cysts, cardiac arrhythmias, dizziness, edema (swelling), fatigue, gastritis, gastroesophageal reflux disease (GERD), hyperlipidemia, immune system abnormalities, joint pain, knee pain (exacerbated), lymphadenopathy (swollen glands), myalgia (muscle pain), neuralgia (nerve pain), osteopenia, spasms.¹⁴

Thousands of women are taking these drugs annually, and many are unaware of the dangers they risk. The American Society for Reproductive Medicine recommends that women considering the use of fertility drugs should be told there is a possibility of increased risk of cancer, and should be told about alternatives.

In addition to risks from these drugs, infertility patients have an increased risk of ectopic pregnancy, a potentially life-threatening surgical emergency. Fertility drugs have also spurred a dramatic rise in multiple births: twins, triplets, and higher multiples. In 2000, 53% of infants born through ART were multiple births, compared to 3% of births in the general population. The twin rate was 22 times higher than the general population; the triplet and higher multiples rate was 50 times higher.¹⁵ Their higher risk for birth defects and low birth weight add to already over-burdened health care costs.

ICSI (intracytoplasmic sperm injection), which was “successful” in humans before it was tried in animals, is the microscopic injection of a single sperm into a single egg. It is now employed in approximately 40% of IVF cases.¹⁶ Recent research has shown an increased risk of birth defects in the children conceived in this manner. Mothers are burdened with the knowledge that their children may be impaired for life due to their choice to use this technology.

All these factors represent significant psychological burdens for women but even worse is the horrific prospect of selective reduction, in which the mother is asked to choose whether to terminate one or more of her children in utero to improve the outcome of the remaining siblings.¹⁷ Selective reduction is a type of abortion. These mothers are likely to develop Post Abortion Stress Disorder, a form of Post Traumatic Stress Syndrome, caused by the trauma of undergoing an abortion. Grief, depression, eating disorders, panic attacks, alcohol and drug problems, nightmares, flashbacks and an inability to enjoy life are common among sufferers. It is a form of disordered mourning which can persist a lifetime. An abortion changes a woman forever: physically, emotionally, and spiritually.¹⁸

Medically one of the most problematic aspects of IVF is that 75% of women fail to become pregnant in any given cycle. It is devastating for them to endure the indignities of these risky drugs and treatments, only to find each month that they have not become pregnant or that their developing child has miscarried. As the months pass, the sorrow mounts. Many couples

divorce under such pressure.

Other Abuses

As in any system where there is minimal regulation, dishonesty can occur. Several doctors have betrayed their patients' trust. In 1995 Dr. Ricardo Asch was accused of stealing his patients' embryos and placing them into the wombs of other women. He was indicted, but fled to Mexico. In 1992 Dr. Cecil Jacobson used his own sperm to fertilize as many as 75 eggs that were to receive anonymous donors. Labeling mistakes have resulted in embryos being accidentally placed in the wombs of unrelated and unsuspecting women. In this industry there is obviously no assurance that "you get what you pay for."

Ovum Donation

George J. Annas, a medical ethicist who strongly favors reproductive technologies, has expressed concern about the medical risks to the women who donate their eggs for use in IVF. Ovum donation, he states, is "a medical procedure with major risks. There's a sharp limit of the number of ovum women can donate, and there can be ... significant problems to this."¹⁹

Annas contends it is critical that,

*every ovum donor should have their own physician, ... not a physician, you know, who is involved in the IVF procedure, is already committed to the couple or committed to make sure that eggs are gotten for these particular patients, but is committed to this person as a patient, to this woman who's undergoing a significant procedure with significant risks.*²⁰

Donating eggs clearly poses a health risk for women. Interestingly, it is illegal to sell any human body parts ... except eggs. These go to the highest bidder, often over the Internet. Some report as high as \$50,000 for the right pedigree of looks, personal qualities, and SAT scores.²¹ In 1999, according to the American Society for Reproductive Medicine, approximately 8,000 donor eggs were transferred. The money may sound enticing to a young college woman, however, after enduring the debilitating cycles of questionably safe medications in a poorly regulated industry, only to give up all claim on her genetic child, she may literally be making the biggest mistake of her life. The American Society for Reproductive Medicine has developed guidelines that place a \$5,000 limit on donor compensation, and calls for independent medical and psychological evaluations of the donors.²² However, not all centers adhere to these guidelines.

Currently, the law forbids the use of federal funds for experiments on embryonic stem cells except those from cell lines derived and established from embryos killed prior to August 9, 2001. Faced with this limitation, the private sector funds the research itself. Recently, a New York Times editorial praised the privately funded Harvard research that has produced 17 new lines of stem cells, more than doubling the existing lines.²³ If this research persists despite federal law, it's not difficult to imagine what will happen if and when the political climate changes. It's even easier to anticipate the devastating ripple effect it will have on women, as demand grows for their eggs and embryos.

Cloning

Cloning is not only dangerous to the women exploited for their eggs, but utterly dehumanizing to the person cloned, whether for reproductive or research purposes. In this process, an egg is surgically taken from the woman's ovary which has been hormonally manipulated. The nucleus is removed from the egg, and the nucleus from a body cell of the individual to be cloned is transferred into the empty egg and fused with an electric current. The donor of the somatic cell then becomes the genetic parent of his or her own identical twin.

Let's look at the magnitude of the needs and the number of women who would have to donate eggs if cloning were ever to be useful in treating disease. The process is so fragile and inefficient that despite having already cloned five animal species, we hypothesize the need for dozens, if not hundreds, of eggs to be obtained for each clone, who would then be destroyed to harvest his stem cells in the effort to find treatments for diseases such as Parkinson's, Alzheimer's and diabetes. Where will we obtain these eggs? We need look no further than our present IVF data. If IVF donors average 10 to 15 eggs retrieved per hyper-stimulated cycle, and each patient with Parkinson's Disease needs 50 to 100 eggs to produce a clone in the effort to obtain stem cells, then the one million Parkinson's patients alone, would need 50 million eggs from probably 5 million donors. For the 17 million with diabetes, 850 million eggs would be required from 85 million egg donors.²⁴ It would be necessary to set up the equivalent of a human assembly line to manufacture enough clones to meet the demand, treating millions of women as human egg factories. Putting so many women's lives in jeopardy would be a travesty.

In summary, scientific advances in IVF and related fields have given us the means to manipulate God's plan for creation. This is contrary to what has been imprinted on the human heart. Biotechnologies, such as IVF, embryo research and cloning, are profoundly anti-woman. Questionably safe drugs, a poorly regulated industry, and lack of long-term research all place women's and children's lives in jeopardy. The potential increased risk for ovarian and breast cancer further supports this claim. It is unconscionable to allow the physical, psychological and spiritual damage inflicted on these women to continue, and indeed, escalate. How can we, under the guise of treating infertility, building a better human, or finding cures for intractable diseases, continue to experiment on women, bombarding them with hormones to super-ovulate, and using them as egg donors and surrogate wombs? There must be better answers. It should be our goal, as responsible stewards of life, to find them.

Dr. Marie Anderson received her M.D. from Georgetown University School of Medicine in 1989. She received board certification in 1995 and became a Fellow of the American College of Obstetrics and Gynecology the following year. Dr. Anderson currently practices at the Tepeyac Family Center, where she joined Dr. John Bruchalski, director, in 1997. She is the current secretary of the Metropolitan Catholic Medical Guild and serves on the Bioethics Committee at Fair Oaks Hospital where she practices.

Dr. John Bruchalski received his M.D. in 1987 and did his residency in OB/GYN at the Eastern Virginia Medical Center and the Jones Institute for Reproductive Medicine. He was board certified in 1993 and opened the Tepeyac Family Center in Fairfax, VA in 1994. Dr. Bruchalski

lectures widely on NFP, the abortion-breast cancer link, and the renaissance in Catholic medicine.

Program Models

Pastoral Care for Infertility

“*Begotten, Not Made: Pastoral Care for Couples Experiencing Infertility*” is a program developed by the Family Life Institute. The program manual is used to aid dioceses in counseling infertile couples and provides moral teachings on dealing with infertility. For more information on how to start this program in your diocese contact the Family Life Institute at 703-365-7281 or visit their website www.familylifeinstitute.org.

The October 16 Feast of St. Gerard Magella, patron of infertile couples and expectant mothers, presents a wonderful opportunity to ask the parish to pray for couples who are having difficulty conceiving a child. The Redemptorists sponsor the “League of St. Gerard Magella,” and offer inexpensive prayer cards, medals and booklets through Liguori Publications. Contact Liguori at www.liguori.org or by calling 800-325-9521.

Building Better Humans?

Organize a discussion group - parish seniors, parents and teens or high school students, for example - to get together weekly or biweekly for 4-6 sessions to discuss the dangers inherent in human efforts to create or “improve upon” humanity through technology. Bioethical issues can be raised in the context of thought-provoking movies and novels. Movies like “Gattaca” and “Blade Runner” contain many themes worthy of discussion, as do such novels as *Brave New World* (Aldous Huxley), *That Hideous Strength* (C.S. Lewis), and *The Island of Dr. Moreau* (H.G. Wells). A knowledgeable facilitator can develop questions for discussion and provide explanations of Catholic moral teaching based on the print resources listed below.

Resources

Teaching Documents

Declaration on the Production and Scientific and Therapeutic Use of Human Embryonic Stem Cells. Pontifical Academy for Life, 2000. Visit www.vatican.va.

Instruction on Respect for Human Life in its Origin and on the Dignity of Procreation. Congregation for the Doctrine of the Faith, 1987. USCCB: Call 800-235-8722 or visit <http://www.usccbpublishing.org>.

The Gospel of Life. Pope John Paul II, 1995. USCCB: Call 800- 235-8722 or visit <http://www.usccbpublishing.org>.

Print Resources

A Catholic Guide to Medical Ethics: Catholic Principles in Clinical Practice. Eugene F.

Diamond, M.D., Palos Park, Illinois: The Linacre Institute, 2001. Visit www.cathmed.org (\$25.00).

Catholic Bioethics and the Gift of Human Life. William E. May, Huntington, Ind.: Our Sunday Visitor Books, 2000 (\$17.95).

Cutting-Edge Bioethics: A Christian Exploration of Technologies and Trends. John F. Kilner, et al. (eds.), Grand Rapids, Mich.: Wm. B. Eerdmans Pub. Co., 2002 (\$22.00).

Ethical Issues in Human Cloning. Michael C. Brannigan (ed.), New York: Seven Bridges Press, 2001 (\$19.95).

Explaining Catholic Teaching: Cloning and Stem Cell Research. Anthony McCarthy, London: The Incorporated Catholic Truth Society & The Linacre Centre, 2003. Visit <http://anscombebioethics.bigcartel.com/>.

Human Cloning: Assault on Life and Dignity. National Committee for a Human Life Amendment: Washington, D.C. Flier is available at <http://www.nchla.org/>.

Human Cloning and Human Dignity: An Ethical Inquiry. Washington, D.C.: The President's Council on Bioethics, 2002. Available at <http://bioethics.georgetown.edu/pcbe/reports/cloningreport/>.

Human Cloning: Playing God or Scientific Progress? Lane P. Lester and James C. Hefley, Grand Rapids, Mich.: Fleming H. Revell, 1998. Call 800-877-2665.

Human Dignity and Reproductive Technology. Nicholas C. Lund-Molfese and Michael L. Kelly (eds.), New York: University Press of America, 2003. Visit www.univpress.com or call 800-462-6420.

Issues for a Catholic Bioethic. Luke Gormally (ed.), London: The Linacre Center, 1999. Visit <http://anscombebioethics.bigcartel.com/>.

Life, Liberty and the Defense of Dignity: The Challenge for Bioethics. Leon R. Kass, M.D., San Francisco: Encounter Books, 2002 (\$26.95).

The Future is Now: America Confronts the New Genetics. William Kristol and Eric Cohen (eds.), New York: Rowman & Little Field Publishers, 2002 (\$19.95).

Respect for the Human Embryo, Summer 2001 (Vol. 1, No. 2). Edward J. Furton, M.A., Ph.D. (ed.), Boston, Mass.: The National Catholic Bioethics Quarterly, 2001.

The Whole Truth about Stem Cell Research, What Hollywood, Biotechnology and the News Media Leave Out. William L. Saunders, Jr. and Charles A. Donovan, Washington, D.C.: Family Research Council, 2001 (\$4.50).

What is Man, O Lord? The Human Person in a Biotech Age. Edward J. Furton, M.A., Ph.D. and Louise A. Mitchell, M.T.S. (eds.), Boston, Mass.: The National Catholic Bioethics Center, 2002 (\$24.95).

Without Moral Limits: Women, Reproduction, and Medical Technology. Debra Evans, Wheaton, Ill.: Crossway Books, 2000 (\$14.99).

Internet

USCCB Secretariat of Pro-Life Activities
<http://www.usccb.org/about/pro-life-activities/>

The Coalition of Americans for Research Ethics
www.stemcellresearch.org

Americans to Ban Cloning
www.cloninginformation.org

National Committee for a Human Life Amendment
<http://www.nchla.org/index.asp>

Endnotes

1. Abma, J. C. et al. Centers for Disease Control and Prevention, National Center for Health Statistics. *Fertility, Family Planning and Women's Health: New Data from the 1995 National Survey of Family Growth*, Report No. 19; Series 23, 1997.
2. The Centers for Disease Control and Prevention began collecting data on IVF only in 1996. Between then and 2000, the number of IVF procedures increased 54% to almost 100,000 a year from about 65,000 a year. In the same period, live births of children conceived through ART increased 67%, to 35,025 from 20,921. Wright, V.C. et al., *Assisted Reproductive Technology Surveillance - United States, 2000*, Morbidity and Mortality Weekly Report, Aug. 29, 2003; vol. 52, no. SS-9.
3. Perlman, J., "Is This Any Way to Have a Baby?" *Oprah Magazine*, February, 2004.
4. Maria Bustillo, M.D., Testimony before Science, Technology, and Space Subcommittee of the Senate Commerce, Science and Transportation Committee, March 27, 2003.
5. Wright, et al., see note 2.
6. www.popsci.com/popsci/medicine/article/0,12543,411770-2,00.html and www.popsci.com/popsci/medicine/article/0,12543,411770-3,00.html. *Physician's Desk Reference (PDR) 2002*, Thompson, pp. 735-737.
7. *PDR*, at 735-737.
8. *Ibid.*, at 3223-3225.

9. Perlman, *supra*, note 3.
10. *Ibid.*
11. *American Journal of Epidemiology*, 136: 1175-1220, 1992.
12. Burkman, Ronald, *et al. Fertility and Sterility*. Infertility drugs and the risk of breast cancer: findings from the National Institutes of Child Health and Human Development Women's Contraceptive and Reproductive Experiences Study, Vol. 79, No. 4, 844-851, April 2003.
13. *PDR*, at 3280-3284.
14. Lynne Millican, testimony before Senate Committee on Commerce, Science & Transportation, "Cloning: A Risk to Women?" March 27, 2003.
15. Wright, *et al.*, *supra*, note 2.
16. www.popsci.com/medicine/article/0,12543,419326-2,00.html.
17. Blickenstein I., Keith L.G., (eds.) *Iatrogenic Multiple Pregnancy: Clinical Implications*. London: Parthenon Publishing, 2000.
18. See www.afterabortion.org and www.hopeafterabortion.org for numerous articles on this topic.
19. Transcript, President's Council on Bioethics, March 7, 2003.
20. "...And that's because I believe in two things ... Number one, that there should be no purchase and sell[ing] of eggs; ...the commercialization of eggs is a problem, and it's a subterfuge to call this just giving money for inconvenience. And, number two, that any physician who is worthy of the name would not subject his patient to a risky procedure just for the sake of being paid for their inconvenience. It can't be done. It can't be justified. ... The role of physicians is problematic, and if you're going to be a physician and deal with things like egg alternatives that don't put healthy women at risk for "money" donation, you have to, it seems to me, put the best interest of your patient first, do no harm first, and there are some things that you just have to say we can't do (*Ibid.*).
21. Perlman, *supra*, note 3.
22. www.usnews.com/usnews/issue.030113/health/13donor.b.htm
23. "The Privatization of Stem Cells", *New York Times*, March 9, 2004.
24. David Stevens, M.D. private communication, May 7, 2002.

