



Louise Brown's birth 19 years ago in Oldham, England, was heralded as miraculous. She was the world's first test-tube baby, indeed a medical miracle. In a laboratory petri dish an ovum from her mother had been combined with sperm from her father, incubated for a few hours, and then implanted into her mother, where Louise matured until birth. This whole process is known as in vitro fertilization. It is one of the amazing possibilities of modern medical technology, designed to assist couples who have trouble conceiving or carrying their own offspring to term.

As far back as the 1930's medical science had developed the ability to inseminate a woman artificially by injecting her with a sufficient quantity of her husband's sperm or, in some cases, with the semen of an anonymous donor. Since that time a variety of hormone and drug therapies, diet and exercise regimens, laboratory-generated technologies and invasive surgeries have emerged, all with the specific goal of assisting some of the nine million Americans--estimated to be one in every six married couples of childbearing age--who face the often painful dilemma of infertility. The number of infertile couples worldwide is proportionate.

In the nearly 20 years I've been a priest and 12 since I finished a doctoral degree in bioethics, the number one moral issue that ordinary people and pastors approach me with is precisely this--infertility and the moral issues related to proposed reproductive therapies. Whether it is artificial insemination, in vitro fertilization, surrogate motherhood or lesser known procedures with acronyms like GIFT and TOT, many of the 2.3 million couples who seek the help of fertility specialists each year find themselves confused by the language, the technology, the cost, the often conflicting diagnoses and recommendations, and the sometimes inflated promises of a baby-to-come.

### [Moral Questions Abound](#)

For people of faith and goodwill, Christian or not, there are also moral qualms and questions. Is it right to manipulate Mother Nature? Are we playing God? Just because advanced medical technology can do something, does that automatically translate into obligation? Surely there are limits that define the humane and ethical use of medical science and technology.

For Catholics there are also more specific, Church-related questions. Are these procedures morally acceptable according to Church teaching? Have the pope and bishops or some council or official Church body spoken on these matters? Some Catholics, familiar with the Church's strong defense of procreation as one of the core meanings of marital lovemaking, tend to assume that the Church must be in favor of any and all medical aids to achieve conception and the birth of a child. Not so. The Catholic viewpoint is at the same time more compassionate and more complex than a simple yea or nay.

When asked for a comment about Baby Louise Brown's birth in 1978, Cardinal Albino Luciani--soon to be elected Pope John Paul I--began by congratulating the happy parents and wishing the new baby and her family a healthy and blessed life. He then tactfully noted that there remain moral questions surrounding laboratory-based methods of conception. These new technologies were under study by scholars and a more in-depth moral response would



come later, after fuller investigation.

In March 1987, almost a decade later, the Vatican's Congregation for the Doctrine of the Faith issued a lengthy document, *Donum Vitae* (*The Gift of Life*), known officially as *Instruction on Respect for Human Life in Its Origin and on the Dignity of Procreation*.

### [The Pain of Infertility](#)

Within a month of the *Instruction's* release, Chicago's Cardinal Joseph L. Bernardin, known for both pastoral sensitivity and scholarly nuance, delivered a lecture on the *Instruction* at the University of Chicago. Before engaging in the real though somewhat heady pros and cons of the moral debate, Bernardin paused "to make one point very clear." He said, "I have heard the pain of loving couples, Catholic and non-Catholic, who desperately want the gift of a child. My heart reaches out to them. Theirs is a difficult burden, and I share their pain. We must offer them love, support and understanding. And in the end, after careful and conscientious reflection on this teaching, they must make their own decision."

Any discussion of the moral rightness or wrongness of modern reproductive technology has to start there, with the very real, often painful situation of the married couple who have difficulty conceiving.

In a culture like ours, which is so focused on success and getting ahead, and in which most people hope to pass on the fruit of their success to their children, the inability to conceive or to carry a child to term can be a stressful and embarrassing experience. The inability to conceive can wreak havoc on a woman's or a man's self-esteem, one's own sense of being feminine or masculine, even on marital communication and fidelity. Pressure from others makes an already awkward and hurtful situation even more difficult. Some of this pressure could be parents seeking grandchildren, friends asking when or why not—even the annual I.R.S. question about the number of dependents to declare for taxes.

Couples who seek help from fertility clinics and specialists are good people, people who desire the blessing and privilege of parenthood very much. Empathy, compassion and gentleness are called for from all outsiders. It is within this context of compassion that we look at some of the more common fertility therapies and at the moral issues related to using them.

### [The Technical Options](#)

When couples first consult endocrinologists and fertility specialists, a variety of diagnostic examinations and tests are performed to determine, if possible, the root cause of the problem. Initial treatment options are sometimes labeled low-tech, though they can be costly and not without significant side effects. Men are advised to wear looser underwear, to adopt healthier eating habits and to exercise and rest more consistently. All of these impact sperm production.

In addition to healthier diets, exercise and rest, women often require one or more series of hormone treatments (to stimulate ovulation) and possibly corrective surgery (to remove scar tissue or to reposition reproductive organs). Since infertility generally is not considered a

disease or a life-threatening illness, these costly procedures frequently are not covered by a couple's health insurance.

All of these initial options are sanctioned by the Church, since none interferes with or substitutes for conjugal lovemaking. Even use of the birth control pill is morally acceptable, provided it is done to regulate the woman's cycle in an attempt to foster conception. If these preliminary efforts fail, however, a couple is then faced with more invasive and sophisticated technological options.

Entering the world of fertility clinics and specialists, one soon learns that the two main classes of treatment options are 1) *homologous* procedures (those which use *only* the couple's own biological materials--sperm, ova and uterus) and 2) *heterologous* procedures (those which introduce a third person's biological parts into the process--donor sperm, donor ova and/or a surrogate womb).

The most well-known homologous procedures are artificial insemination with the husband's sperm and in vitro fertilization using the wife's own ova and her husband's sperm. The process for artificial insemination is relatively simple. Semen is collected from the man, either by self-stimulation or with a sterile needle, and is used immediately or may be frozen and stored for future use. At the time of ovulation a supply of this semen is injected into the woman's upper vagina or directly into the uterus by syringe or catheter. The sperm swim through the uterus and up toward the fallopian tubes, where one sperm may impregnate the newly released ovum. Conception occurs in as high as 60 percent of cases or as low as 10 percent, depending on the clinic, the couple, the timing and the viability of the sperm and ovum.

In vitro fertilization (IVF) is usually a four-part process. First, the woman's ovaries are stimulated chemically to induce ovulation. Second, several nearly ripe ova (eggs) are retrieved surgically through the insertion of a fine needle and tubing. Sperm too is collected, as in artificial insemination. Third, the sperm and ova are fertilized in a laboratory and allowed to cleave or multiply several times. Finally, one or often several embryos (also called pre-embryos, blastocysts or zygotes) are inserted into the woman's uterus where, hopefully, at least one will implant and grow. Approximately 27,000 IVF procedures are done each year in this country. Each four-part procedure costs in the \$6,000-\$10,000 range with a median success rate near 18 percent.

A given couple may have to repeat the IVF process four or five times before achieving a successful pregnancy. Multiple births (twins, triplets, quadruplets) are not uncommon when more than one IVF-generated embryo is injected. So too the likelihood of multiple births increases 25 to 30 percent when a woman's ovulation is being artificially stimulated by fertility drugs. The risk of miscarriages, congenital birth defects, prematurity and low-birthweight complications increases significantly whenever multiple embryos implant in utero.

Specialists have developed a relatively new procedure (intracytoplasmic sperm injection) as an addendum to in vitro fertilization. A single sperm cell is injected directly into the nucleus of a retrieved ovum using a micro-thin needle. This direct insertion of sperm into egg guarantees impregnation in cases where the husband's sperm may be weak or less able to penetrate the ovum's outer shell on its own.



## Catholic Moral Teaching: 'Couple-only' Methods

How does the Church view the morality of these various homologous (couple-only) fertilization procedures? The Catholic Church officially asserts that all conception and procreation ought to occur as the result of marital sexual intercourse.

The Catholic position is that each and every act of sexual intercourse must contain or reflect two core meanings: 1) two-in-one-flesh intimacy (the *unitive meaning*) and 2) an openness to the possibility of conceiving new life (the *procreative meaning*). Gathering sperm--most often done through solitary sex (masturbation)--and then injecting it into the woman with a syringe or catheter seems to interrupt or intrude upon the couple's intimacy, which sexual lovemaking symbolizes. So too with in vitro fertilization. When one surgically retrieves eggs from the woman, mixes them with semen in the lab and then injects them into the woman, the laboratory seems to have superseded the couple in this act of conception. The child to be conceived has moral rights and dignity as well. In addition to the unitive and procreative meanings of the sex act, the Catholic Church also focuses on the inherent and abiding dignity of the person who will be conceived and the stability of the marriage and nuclear family in which she or he is to be nurtured. In a section of the *Catechism of the Catholic Church* entitled "The gift of a child" (# 2373-2379) we find quotes from the moral arguments found in *Donum Vitae*:

"A child is not something *owed* to one, but is a *gift*. The 'supreme gift of marriage' is a human person. A child may not be considered a piece of property, an idea to which an alleged 'right to a child' would lead. In this area, only the child possesses genuine rights: the right 'to be the fruit of the specific act of the conjugal love of his [her] parents,' and 'the right to be respected as a person from the moment of conception'" (# 2378).

## Catholic Moral Teaching Forbids Third Parties

If this is the Catholic Church's official stance on homologous procedures, those which use only the couple's own sperm, ova and uterus, it is not difficult to see why the Church also asserts that *heterologous* procedures are even less morally acceptable. Add to the reproduction process a third party--whether donor ova, donor sperm or a surrogate mother (in whose uterus this artificially conceived embryo will grow to term)--and one can say, in some sense, that the couple are no longer procreating their own offspring. Medical science is doing it for them, with or without their biological contribution, certainly not requiring their two-in-one-flesh lovemaking at all.

Some infertile couples as well as a number of Catholic and Protestant pastors and scholars respectfully disagree with the Catholic Church's prohibition of in vitro fertilization using the couple's own sperm and egg and even artificial insemination of the husband's sperm. They believe that, as long as science and technology are being used to assist a loving, committed married couple to conceive their own biological or genetic child, this ought to be viewed as medical help, not as unwarranted interference. Many of these same critics uphold the official Catholic position, however, when it comes to *heterologous* (third-party) materials. How might a husband or wife feel, knowing that the child he or she is helping to raise is genetically part of one's spouse, but not at all of one's own flesh and blood? It would be



ideal to say that this would leave no psychic scar, that one's male or female ego could cope well with this. After all, stepparents and adoptive parents do it all the time. But in those situations the children are already here, alive and well. We adopt them or take them under our wing because they need a mom or a dad. Is there a difference in saying that we will create such a child, one who is, at best, only half of our marriage and half from an anonymous sperm or ovum donor?

So too, in the short time since surrogate motherhood has been legal, court cases have arisen when a woman who donated ova and volunteered or rented her womb later wants to keep the baby and negate the surrogacy agreement. What are her maternal rights, particularly if the child is 50 percent genetically hers? How much of maternal bonding is psychological as opposed to biological, hormonal and inherent in the very process of bearing a child?

These are the kinds of questions which cause many ethicists, Catholic and otherwise, to challenge the wisdom of heterologous reproductive technologies. Some believe these are not insurmountable questions. Others are convinced that they are serious enough to prohibit morally all heterologous artificial inseminations and in vitro fertilizations.

### **The Problem of Multiple Embryos**

Whether one is talking homologous or heterologous procedures, there is a further complication. In the process of retrieving ova from the woman for in vitro fertilization, it is common practice to remove and fertilize multiple ova, both to increase the chances of implantation and to forestall the need for multiple expensive invasive surgeries in future insertion attempts. Thus, in almost every attempt to insert embryos, multiple fertilized ova (usually four or more) are injected, in the hope that at least one might implant on the uterine wall and begin to grow. Sometimes multiple implantation occurs and the woman bears fraternal twins or triplets. But more often only one or even none implant. The remaining embryos are discharged or miscarried naturally.

If one accepts the Catholic belief that an embryo should be treated as or as if a person, ensouled and endowed with rights from the time of conception, then the immorality of in vitro fertilization is compounded. As it is presently practiced, IVF includes the presence of extra embryos, most destined for natural miscarriage, if injected, or for long-term limbo status, if left frozen in the laboratory for potential later use. Who is responsible for the loss or miscarriage of those embryos which fail to implant? What about life, dignity and potential rights of those human embryos left frozen in the lab?

Add to this the question of ownership should there be a divorce or if one parent dies, as well as the question of what to do with them should the couple not wish any further in vitro attempts, and the question of extra embryos becomes a significant moral issue. The case of an American couple who died in a plane crash, leaving two frozen embryos behind in Australia, brought this potential problem to greater public attention. Could their surviving relatives inherit the couple's property? Or were they obliged to find a surrogate to carry one or both embryos to term, in order that these only-just-begun offspring could inherit their now-deceased parents' estate?



## Morally Debated Options: GIFT and TOT

For these reasons the Catholic Church officially believes that fertilization is morally right only when it is the result of marital sexual intercourse. To conceive an embryo by any other means--whether the material and procedures are homologous or heterologous--is morally wrong. Then, in addition to those methods described earlier as low-tech, are there *any* new or cutting-edge fertility procedures which the Church does allow as moral?

The answer is succinctly phrased in a 1994 set of *Ethical and Religious Directives for Catholic Health-Care Services*, issued by the U.S. bishops' conference: "Those techniques of assisted conception that respect the unitive and procreative meanings of sexual intercourse and do not involve the destruction of human embryos or their deliberate generation in such numbers that it is clearly envisioned that all cannot implant and some are simply being used to maximize the chances of others implanting, may be used as therapies for fertility" (# 39).

Two methods that are frequently cited in this category of morally permissible are Gamete Intra-Fallopian Transfer (GIFT) and Tubal Ovum Transfer (TOT). In the GIFT procedure, sperm and ova are retrieved in much the same way from the couple as would be done for in vitro fertilization. While disallowing masturbation as a morally proper method for semen retrieval, the official Catholic stance would allow surgical removal of sperm (needle injected into the testicle). Some would argue that sexual intercourse using a perforated condom (technically open to procreation) is also morally acceptable.

Once retrieved, the individual gametes (sperm and ova) may be capacitated, that is, cleansed and chemically treated prior to insertion to facilitate easier impregnation. Using a laparoscope, the physician inserts both sperm and ova into the woman's fallopian tubes, where natural fertilization may take place. The GIFT procedure is done about 4,200 times annually in this country, at a cost similar to IVF, \$6,000-\$10,000 per attempt. Success rates in the 28 percent range are somewhat higher than with in vitro fertilization.

Tubal Ovum Transfer (TOT), sometimes called LTOT for Lower Tubal Ovum Transfer, originally involved the retrieval of one or more ova from the fallopian tubes and their reinsertion in the uterus. Natural intercourse follows, with the nearness of the ovum (or multiple ova) enhancing the chances that the husband's sperm will impregnate it. This transfer of the ova from the fallopian tubes to the uterus, facilitating easier access for the sperm, would seem to be particularly helpful if there is scar tissue or blockage in the woman's fallopian tubes or if the man's sperm count is low or his sperm slow-moving. Unfortunately, LTOT has proven to be relatively unsuccessful.

Since 1985 LTOT's proponents have modified the procedure to include retrieval and insertion of *both* sperm and ovum into the fallopian tubes or uterus. The sperm has been gathered just prior to this GIFT-like insertion procedure through marital lovemaking with the use of a perforated condom. Thus, any resulting pregnancy could be said to be the result of conjugal intercourse with the lab merely assisting slow sperm and/or aiding the sperm and ovum to bypass female tubal blockage.



## Church Teaching Unresolved

In 1987, when the Vatican issued *Donum Vitae*, Cardinal Joseph Ratzinger responded to a media question concerning the morality of physicians offering the GIFT and TOT procedures: "When the discussion is still open and there is not yet a decision by the magisterium, the doctor is required to stay informed, according to classic theological principles and concrete circumstances."

He concluded by saying that a physician must "make a decision based on his [her] informed conscience." In other words, where there is no official Church pronouncement, physicians and infertile couples are free to weigh the merits of a given procedure against the moral values that apply in the case of other acceptable or forbidden methods and to make their own conscientious decision in good faith.

Some bishops and scholars, like Cincinnati's Archbishop Daniel E. Pilarczyk and *Donum Vitae* committee members Bartholomew Kiely and Elio Sgreccia, come down on the side that sees GIFT and TOT or LTOT as aids to natural intercourse and procreation. Therefore they view these methods as morally permissible uses of reproductive technology.

Other theologians, like Dominicans Benedict Ashley and Kevin O'Rourke and Jesuit ethicist Richard McCormick, question the naturalness of retrieving gametes and reinserting them via needles and micropipettes. They do not believe this is substantially different from what is going on in artificial insemination and in vitro fertilization procedures. As Ashley and O'Rourke state it: "We ourselves question that TOT and GIFT are acceptable processes because the technology involved seems to replace the conjugal act as the sufficient cause of the uniting of the sperm and ovum rather than simply to assist it."

Richard McCormick's objection is similar, though he seems to come down on the side of allowing more, rather than declaring these borderline options immoral. If one is willing to accept GIFT and TOT as valid assistance to a couple's natural lovemaking, he says, then it is "moralistic nitpicking" to disallow other homologous procedures, especially artificial insemination of the husband's sperm.

Whatever moral conclusion one adopts, it seems clear that the Catholic Church has made no definitive or official universal pronouncement about these two procedures. Where there is no definitive teaching or moral conclusion, Catholics are free to discern conscientiously their own moral situation, opting for or against GIFT and TOT, while remaining in good standing with God and with the Church.

## Balancing Empathy and Discernment

In this brief overview I would like to have cited more case studies and personal stories from the lives of real infertile couples. I have refrained from doing so because I find their life stories and their experiences too intimate, too personal, too painful to write about in so public a forum. If you are an infertile woman or man reading this article, please know that the best of clergy, pastoral ministers, chaplains and fertility specialists empathize with you and want you to find happiness.

Each situation is unique and deserves our respect. Infertility is a layered and complicated issue. Discerning morally right courses of fertility treatment from those that are objectively

wrong is not a knee-jerk process.

---

It's important to note that after some months or even years on the fertility roller coaster some couples opt out. They may feel drained--financially and otherwise--and desire to stop the fertility drugs, treatments and rigidly prescribed monthly sex regimens.

If a couple's fertility difficulties are minor or easily corrected, the likelihood of pregnancy within the first year of treatment is greater. The potential success rate drops, however, with each failed therapeutic attempt. For example, IVF offers a 13 to 18 percent rate of success the first time, which diminishes to only 4.3 percent by the fourth cycle or try. In some cases adoption, foster-parenting or volunteering one's time in such worthy programs as Scouting, youth work and Big Brother/Big Sister programs may be viable alternatives to the more questionable reproductive technologies.

Compassion for the couple must be balanced with thoughtful moral discernment in all discussions about the use of modern reproductive technologies. I hope this article serves as helpful input--grist for the moral decisionmaking mill--of pastoral ministers, chaplains, health-care professionals and, especially, those married couples struggling to realize their dream of cocreating with God a healthy newborn infant.

*Richard C. Sparks, a Paulist priest, is a free-lance author, popular speaker and health-care consultant on moral and ethical issues. He holds a Ph.D. in moral theology from The Catholic University of America. He is also associate pastor of Old St. Mary's Church in downtown Chicago. His latest book, Contemporary Christian Morality: Real Questions, Candid Responses, is published by Herder/Crossroad. He is featured in the video, [Making Sense of Christian Morality](#), available from St. Anthony Messenger Press.*

Comments welcome! Please visit our [e-mail directory](#).

AmericanCatholic.org

[Copyright](#)© 2002 St. Anthony Messenger Press.  
All rights reserved.