## In Vitro Fertilization and the Fertility Industry

What is In Vitro Fertilization? In vitro fertilization (IVF) is the joining of a woman's egg and a man's sperm in a laboratory dish. "In vitro" means "in glass" or "outside the body." One or more embryos that result may then be inserted in a woman's uterus in order to implant and continue developing. Another term used is assisted reproductive technology (ART).

The fertility industry is a multi-billion dollar global industry, with 2.5 million assisted reproductive cycles being performed/ year worldwide, resulting in 500,000 births/ year.(1, 2019) For 2020, CDC data reports indicate that almost 80,000 children were born in the U.S. from IVF procedures (84,000 in 2019). In 2020, nearly 180,000 cycles were begun with patient eggs, and over 20,000 with donated eggs or embryos; the latter group resulted in almost 10,000 children born. (2) As the age of the woman increases, the success rates with her own eggs declines, and so the use of donor eggs increases.

Rather than focusing on diagnosing and correcting the dysfunction of the reproductive system, ART replaces the usual method of reproduction with an alternative. The industry recruits young, healthy women to be egg donors, offering significant financial compensation, and promising the safety of the procedure. Donors are recruited from college campuses and third world countries, but the process of hyperstimulating the ovaries to produce multiple eggs is not without serious risk. The documentary film, *Eggsploitation*, tells disturbing stories of young donors who suffer infertility, stroke, heart attack, and other major negative consequences of the procedures. (3)

First step: collecting eggs and sperm. The egg donor is injected with powerful hormones to stimulate her ovaries to produce several eggs at one time, rather than a single egg, as is normally produced during a woman's monthly cycle. The eggs are removed from her body in a minor surgery, using ultrasound images to guide the collection. The sperm donor usually produces sperm through masturbation. The couple seeking to have a child may use any combination of their own or donated eggs and sperm. Donated sperm and eggs may be selected based on the donor profile, outlining qualities such as height, body type, intelligence, attractiveness, etc. Even couples who intend to use their own eggs and sperm may be encouraged to use donor eggs in order to increase chances of success; the fertility clinic wants to maximize their success rate in order to attract more clients.

<u>Creation of embryos.</u> Several eggs and sperm are incubated together to allow sperm to fertilize the eggs. In some cases, sperm is directly injected into the eggs (intracytoplasmic sperm injection (ICSI)). The fertilized eggs begin to divide into a number of cells, and are then called embryos. In cases where the couple is at risk to pass on a genetic defect to the child, some labs will do pre-implantation genetic testing (PGT). In this procedure, one cell is removed from one or more of the developing embryos in order to determine whether they carry the unwanted gene. Embryos with the defective gene would presumably be discarded. PGT also determines the sex of the embryo, allowing the possibility of sex selection. For cycles begun in 2020, 77% of transfers included at least one embryo with ICSI, and about 48% included at least one embryo with PGT. (2)

<u>Embryo Transfer</u>. Five days after egg collection and fertilization, "the best" embryos are selected and one or two (or possibly more) are injected into the woman's uterus. The exact number transferred depends on several factors, especially the woman's age. Older women have lower success rates of achieving pregnancy with IVF, and so more embryos are generally implanted to increase the chances of success. Many additional embryos are never implanted; they are either discarded, made available for research or experimentation, or frozen for possible future use.

<u>"Pregnancy Reduction":</u> When several embryos are transferred, multiple embryos may survive, presenting a significant risk to the health of both mother and children. If a woman becomes pregnant with more than two or three babies, she is offered the option to selectively abort some of the children, in order to increase the chances for survival of those remaining, as well as decrease the stress on her own body. In recent years,

there has been a tendency to inject fewer embryos, making this less of an issue. For cycles begun in 2015, only 46% of transfers involved only a single embryo, but in 2020, that was the case for 80% of transfers. (2)

## Moral Issues.

Basic values to consider:

1. Due respect for human life from the moment of conception. Aside from the mechanism whereby any human embryo comes into existence, each human embryo is nevertheless to be regarded as a child of God, created by Him, in His own image. Every human child is to be treated with respect and should not be deliberately subjected to adverse conditions that put his or her survival at risk. The fact that not all of the embryos fertilized in vitro survive even 5 days speaks poorly of the ability of the in vitro environment to nurture these embryos. Even after transfer into the woman's uterus, only 25 - 42% of the embryos survive, depending on the woman's age.(2) And so the use of in vitro fertilization necessarily and knowingly involves the production of many more embryos than will ever survive. In effect, the "extra" embryos are treated as disposable byproducts of the process of producing one wanted child. The one child who may be born comes at the cost of several other lives. Even for those who survive, the outcome is not always optimal. Children born as a result of IVF have proven to have higher rates of birth defects than children conceived naturally.(4) It is very difficult to obtain data on the numbers of embryos actually created, to determine how many embryos die. Over 300,000 IVF cycles were begun in 2020, resulting in 165,041 embryo transfers, and 75,023 live-birth deliveries.(2) (How many embryos were discarded, made available for scientific research, or frozen is unknown.)

The practice of freezing embryos is clearly an attempt to preserve life (rather than discarding them), but again subjects the embryo to adverse conditions which put his or her survival at risk. While overall survival rates for thawing have ranged from 50-80%, a fairly recent improvement in freezing technology (vitrification) has led to survival rates of 90%. Over 1 million frozen embryos remain in storage indefinitely in the U. S.

The use of embryos for research, experimentation or harvesting for stem cells all result in the death of the embryo and inappropriate treatment for a human person.

2. God's Plan for Reproduction and Family Life. God's design for human reproduction involves the creation of new life out the physical expression of love between the mother and father. This sexual expression of love is morally limited only to those who have committed themselves to each other in a permanent, marital relationship, thereby providing the child with two loving parents to share the work of nurturing and educating the child during his many years of dependency. This is a beautiful plan which we disregard at our peril. This plan, with procreation linked to marriage, forms the basis for the human family which is the essential building block of society. "This has been shown across the globe and throughout history: strong family life builds strong communities and nations. A famous 19th century U.S. Supreme Court decision, *Maynard v. Hill*, said of the family based on marriage: "It is ... a relation the most important ... the purest tie of social life, and the true basis of human progress." In other words, families foster qualities that help build good human societies. (5) Society is built up by families who teach their children to serve others and to regard every person with respect. Children come into the family as a result of love and are accepted, as they are, as members of the family.

Medical science is valued for eliminating disease, repairing damaged organs, and restoring natural function. With in vitro fertilization, natural function is not being restored but <u>replaced</u> with technology. The child, along with the "spare" embryos created, is regarded as a product of a technological procedure, rather than a gift from God. Children are considered a right to be demanded, a product to be optimized, rather than a gift to be prayed for and accepted as given. Even couples with every intention of facilitating the conception of their own child may be offered the use of donor eggs in order to increase the probability of success, since the lab's economic success is dependent on their success rate. ("A younger egg donor will

give you 'higher quality' eggs and using a donor will allow you to select for attractiveness, high intelligence, or other desirable qualities...We can screen to eliminate genetic defects, and also select the desired sex...")

In vitro fertilization, or assisted reproductive technology (ART) separates reproduction from marriage, not only physically, but socially. "Anyone—any individual or couple, single or married, young or old, heterosexual or homosexual—can buy sperm or eggs or even a custom-made embryo in the United States. These can be ordered over the Internet with a credit card and delivered to your home or your doctor's office. ... The ART industry, in other words, is regularly and deliberately placing children in situations known to cause problems for them and for society." (6, 7)

In summary, in vitro fertilization is based on and contributes to the same philosophy as abortion and birth control: that children are a choice, a product that may be demanded or refused according the wishes of parents. The concept of children as gifts, created by God, out of an expression of love between parents, and deserving of respect from the moment of creation is not compatible with this practice.

## Related information:

Information sheet on NaPro Technology, an alternative approach to infertility which works with a woman's natural cycle to restore natural function is available at <a href="https://www.ChristianVoicesforLife.org/informationsheets.html">www.ChristianVoicesforLife.org/informationsheets.html</a>.

## References:

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