In Vitro Fertilization.

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).

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.

Creation of embryos. 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 diagnosis (PGD). 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 not be implanted. PGD also determines the sex of the embryo, allowing the possibility of sex selection.

Embryo Transfer. Three to five days after egg collection and fertilization, "the best" embryos are selected and two to four or 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. A report from Yale School of Medicine in 2005 stated that 85% of embryos transferred to a womb with IVF did not survive.(1) Many additional embryos are never implanted; they are either discarded, made available for research or experimentation, or frozen for possible future use. There is debate in the industry whether it is better to implant 8-cell embryos (3 days after fertilization) or blastocysts (an embryo consisting of a ball of many cells, 5 days after fertilization). Only about 30% of the in vitro fertilized embryos survive long enough in vitro to reach the blastocyst stage.(2)

"Pregnancy Reduction": Clinics are motivated to produce a high success rate and will implant several eggs in order to increase the probability that at least one will successfully implant and survive. In some cases, multiple embryos 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.

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 only a fraction 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 15% of the embryos survive.(1) And so the use of in vitro fertilization necessarily and knowingly involves the production of many more embryos than

will ever survive. 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.(3)

The practice of freezing embryos may be seen as 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 range from 50- 80%, the majority of the embryos suffer loss of one or more of their cells.(2)

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."(4) 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 replaced 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." (4)

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.

References:

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