

ASSISTED REPRODUCTIVE TECHNOLOGY

As Christians, reflection on assisted reproductive technologies (ART) must begin with recognition that each individual, beginning at fertilization, is a unique creation with special worth to God.

Additionally, marriage and the family are the basic social units designed by God. Marriage is a man and a woman making an exclusive commitment for love, companionship, intimacy, spiritual union, and, in most cases, procreation.¹ Children are a gift and responsibility from God to the family. Parents are entrusted with providing and modeling love, nurture, protection and spiritual training.

In addition to natural conception and birth, married couples may choose adoption or seek assisted reproductive technology, especially when they are unable to have children naturally. Adoption emulates God's adoption of us as spiritual children. Many assisted reproductive technologies may be an appropriate expression of mankind's God-given creativity and stewardship. A husband and wife who suffer from infertility should pray together for God's wisdom (James 1:5). They should be encouraged to seek godly counsel and guidance when considering these technologies.

However, while we are sensitive to the heartbreak of infertility, certain assisted reproductive technologies present direct and indirect dangers to sanctity of human life and the family. As technology permits further divergence from normal physiologic reproduction, it can lead to perplexing moral dilemmas. Not every technological procedure is morally justified and some technologies may be justified only in certain circumstances. The moral and medical complexities of assisted reproductive technologies require full disclosure both of the medical options available and their ethical implications.

These principles should guide the development and use of assisted reproductive technologies:

- Fertilization resulting from the union of a wife's egg and her husband's sperm is the biblical design.
- Individual human life begins at fertilization.
- God holds us morally responsible for our reproductive choices.
- ART should not result in embryo loss greater than natural occurrence. This can be achieved with current knowledge and technology.

CMDA finds the following consistent with God's design for reproduction:

- Medical and surgical intervention to assist reproduction (e.g., ovulation-inducing drugs or correcting anatomic abnormalities hindering fertility)
- Artificial insemination by husband (AIH)
- Adoption (including embryo adoption)
- In-vitro fertilization (IVF) with wife's egg and husband's sperm, with subsequent:
 - a. Embryo Transfer to wife's uterus

¹ See CMDA Statement : The Non-Traditional Family and Use of Adoption of Reproductive Technologies

- b. Zygote intrafallopian transfer (ZIFT) to wife's fallopian tube
- c. Gamete intrafallopian transfer (GIFT) to wife's fallopian tube
- Cryopreservation of sperm or eggs

CMDA considers that the following may be morally problematic:

- Introduction of a third party, for example:
 - Artificial insemination by donor (AID)
 - The use of donor egg or donor sperm for:
 - In-vitro fertilization
 - Gamete Intrafallopian Transfer
 - Zygote Intrafallopian Transfer
 - Gestational Surrogacy (third party carries child produced by wife's egg and husband's sperm)²
- Cryopreservation of Embryos³

CMDA opposes the following procedures as inconsistent with God's design for the family:

- Discarding or destroying embryos
- Uterine transfer of excessive numbers of embryos
- Selective abortion (i.e., embryo reduction)
- Destructive experimentation with embryos
- True surrogacy (third party provides the egg and gestation)
- Routine use of Pre-implantation Genetic Diagnosis
- Pre-implantation Genetic Diagnosis done with the intent of discarding or destroying embryos.

Conclusion

CMDA affirms the need for continued moral scrutiny of developing reproductive technology. We recognize that as physicians we must use our technological capacity within the limits of God's design.

² Example of appropriate gestational surrogacy: The wife of a couple that has frozen embryos has a change in health status (e.g., loss of her uterus or a major medical problem) that prohibits her from providing gestation. Rather than have their embryos adopted (another acceptable alternative), the couple may choose a gestational surrogate to provide birth to their child.

³ GUIDELINES FOR CRYOPRESERVATION OF EMBRYOS:

1. Cryopreservation of embryos should be done with the sole intent of future transfer to the genetic mother.
2. The number of embryos produced should be limited to eliminate cryopreservation of excessive numbers of embryos.
3. There should be agreement that all frozen embryos will be eventually transferred back to the genetic mother. Should it become impossible to transfer the frozen embryos to the genetic mother, embryo adoption or gestational surrogacy should be pursued.

Background Document for CMDA's Statement on *Artificial Reproductive Technology*

Infertility has long been a source of anguish for some married couples (e.g., I Samuel 1). The Bible presents infertility as a condition in which God may choose to intervene (e.g. Hannah, Sarah, Rebecca, Manoah, Elizabeth). God has also granted mankind the ability to gain knowledge and develop technologies to treat our maladies, including infertility. Medical treatment for infertility first became available over 100 years ago with the introduction of artificial insemination, but these practices did not become widely available until the 1960's.

An increase in the incidence of infertility in the modern era has been associated with social factors such as voluntarily delayed child-bearing, the use of contraceptives, and multiple sexual partners with the consequent transmission of diseases which impair fertility. Current estimates are that one out of six couples experience infertility.

Before the 1970's adoption was the common solution for couples facing infertility - a solution encouraged and lauded by society. Some have argued that the decriminalization of abortion in 1973 made it more difficult for infertile couples to find adoptable babies, thus magnifying the anguish of this affliction.

A better understanding of reproductive physiology combined with advances in medical technology led to the development of several methods of assisted reproductive technology (ART). Most notable of these methods involved in vitro fertilization (IVF), the union of sperm and egg outside of the womb (in vitro = in glass). The birth of Louise Brown in England in 1978 (the first IVF baby) heralded a new era in the treatment of infertility. IVF quickly became a growth industry.

As oft occurs, science and medicine adopted new technology with little consideration for ethical/moral appropriateness. As history has demonstrated, just because technology is available does not mean that it is morally justified to use it.

Paradoxically, the advent of IVF has increased the anguish for some infertile couples. Because these technologies are now available (to those who can afford them), couples must make choices about whether to undergo such assistance, how many cycles to attempt, etc. Such additional choices can cause turmoil - socially, financially, relationally, and morally.

Moral/Ethical Questions

Assisted Reproductive Technology (ART) has raised many ethical questions: Is infertility a disease? Is there a 'right' to conceive, or to have a baby? What is a family? What is the moral status of gametes (unfertilized egg and sperm), of pre-implanted embryo, and of implanted embryo? The advance of technologies that made these become practical questions occurred at a time when many societies around the world were legalizing the termination of pregnancy as a choice.

In response, the Ethics Commission of the Christian Medical and Dental Society (now Christian Medical & Dental Associations – CMDA) addressed the issue in an Ethical Statement on IN VITRO FERTILIZATION in 1983. Considerable discussion subsequently took place prior to proposal and acceptance of the more nuanced and detailed statement on REPRODUCTIVE TECHNOLOGY adopted in 1990. There was agreement on the biblical principles articulated in the preamble of the 1990 statement, but there was not total agreement on the practical application of these principles, as reflected in the body of the statement. The conclusion encourages "continued moral scrutiny" of this still-developing field. The Ethical Statement has subsequently been refined, most recently in 2010. This document provides background for the Ethical Statement.

Biblical Principles

Reflection on ART possibilities by Christians should begin by recalling the sanctity of human life. Each individual is a unique creation with special worth to God. In addition, God is sovereign. He has ultimate control over who will conceive and bear a child. At the same time, we are stewards of our bodies and our resources. We will be held accountable for how we use the gifts He has given us. Children resulting from that union are a gift from God. Also, Scripture demonstrates God's approval of adoption by the fact that believers are adopted into His family by their redemption in Christ Jesus (Romans 8:23).

Concerns

One moral concern of Christians regarding ART is the multitude of embryos which do not develop to maturity. While there is a natural attrition of embryos in both natural reproduction and in ART, the specific concern regards the decisions made in the ART process that result in intentional loss of embryos. Disturbing is the number of embryos (early human life) discarded in the process. Also disturbing are the embryos that remain frozen and not implanted as a result of ART. While some debate their moral status, there is nothing scientifically or biblically that denies that these embryos are unique human beings, simply at an early stage of development. Therefore, CMDA has taken the position that human life is to be honored and protected from its beginning at fertilization – whether that fertilization occurs within the mother's body or in the laboratory.

As mentioned above, normal human reproduction results in the natural loss of a many embryos. After fertilization some embryos do not continue to develop. While the precise loss-rate is not known, it is estimated to be greater than 50%. Artificial reproductive technologies will also result in loss of many embryos. It is CMDA's opinion that ART procedures should not be chosen that knowing result in a loss-rate of embryos greater than that estimated to occur naturally.

There are other ethical debates beyond the scope of this paper. One example regards the grading of IVF embryos as a determinate for implantation. While we may gain knowledge that guides us to know that certain embryos have no chance of further

development (and therefore implantation would be futile), when there is doubt, deference should be given to providing an opportunity for continued development for each embryo.

Future technologies will raise new dilemmas, as well as provide some ethically acceptable solutions. But for Christians, decisions to accept or apply these technologies must first be determined by biblical instruction. While there will be grey areas requiring discernment guided by prayer and godly counsel, decisions that result in destruction of early human life are not morally acceptable.