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**Ethical Response to the Assisted Reproductive
Technologies (ART) of In Vitro Fertilization
(IVF) and Surrogacy**

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Abstract: Assisted Reproductive Technologies (ART), which include procedures such as In Vitro Fertilization (IVF), present complicated ethical challenges. ART includes various means to grow one’s family through fertility treatments and other medical procedures. While ethical concerns about ART affect individuals across diverse worldviews, Christians need to grasp the ethical ramifications surrounding the use of ART to create a child. Believers must understand the nature and implications of these technologies in order to respond in a biblically faithful manner.

This paper provides an overview of both the history of IVF and the closely related ethical issue of surrogacy. This examination also includes relevant data on costs, success rates, and possible legal issues, with a clear distinction between IVF and surrogacy practices. Lastly, a concise biblical response is offered, addressing the ethical issues surrounding ART and proposing how believers can face this topic. Given the rapid advancements in reproductive technologies and evolving legal definitions of life and personhood, this subject requires ongoing ethical reflection and theological engagement.

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Introduction

In recent years, the increasing use of Assisted Reproductive Technologies (ART), particularly In Vitro Fertilization (IVF) and gestational surrogacy, has garnered widespread attention in popular media. High-profile celebrities have publicly shared their experiences with ART, contributing to its normalization as a means to grow their families. Beyond celebrity culture, social media influencers, including professing Christians such as Dan and Sam Mathews, have openly documented their experiences with gestational surrogacy, further expanding the public discourse around these technologies.¹ ART encompasses various means to grow one's family, but this paper will focus primarily on IVF and secondarily on the use of a gestational surrogate via egg collection from the IVF process. While some individuals pursue ART in response to medical infertility, others are using IVF and surrogacy to avoid complications associated with advanced maternal age or as a way to ensure a healthy mom and baby. Regardless of the motivation, the media's attention surrounding ART has created a more mainstream conversation around the ethics of creating a child.

Ethical concerns surround ART, particularly regarding the creation and destruction of embryos, the moral implications of surrogacy, the rights and dignity of surrogate carriers, and the legalities associated with conceiving a child through the use of ART. These issues have come to the forefront in the United States with the recent Supreme Court of Alabama ruling on the personhood of created embryos. In this case, three couples sued the Center for Reproductive Medicine and Mobile Infirmary Association in Mobile, Alabama, after a tragic incident in

¹ See their YouTube channel: Dan Mathews and Samantha Mathews, "We Are Dan and Sam," YouTube, 2020, https://www.youtube.com/channel/UCcJ0xWWzTn-q3EFd16gkO_Q.

December 2020, caused the loss of the couples' frozen embryos.² According to court filings, a patient at the clinic gained unauthorized access to the cryogenic storage facility shared with the fertility clinic.³ The record states,

A patient at the Hospital managed to wander into the Center's fertility clinic through an unsecured doorway. The patient then entered the cryogenic nursery and removed several embryos. The subzero temperatures at which the embryos had been stored freeze-burned the patient's hand, causing the patient to drop the embryos on the floor, killing them.⁴

Each couple held the fertility clinic responsible for the loss, citing negligence on the part of the clinic.⁵

This Alabama Supreme Court ruling has intensified the cultural and legal debates about what constitutes personhood. The broader culture defends reproductive rights at the potential expense of human life. These conversations have created the urgent need for a biblically faithful response that pastors, theologians, and biblical counselors can offer to those considering using ART to create a family. Central theological questions arise: Can IVF be done in a manner that is consistent with biblical ethics regarding the sanctity of life, and if so, how? Should surrogacy be considered an option for couples unable to carry a pregnancy, but possessing biological embryos created through IVF? These questions demand careful moral discernment informed by Scripture and Christian tradition. This paper, therefore, examines the historical development and financial costs of IVF and surrogacy while also engaging the ethical issues that arise from the use of ART

² Supreme Court of Alabama, “James LePage and Emily LePage, Individually and as Parents and Next Friends of Two Deceased LePage Embryos, Embryo A and Embryo B; and William Tripp Fonde and Caroline Fonde, Individually and as Parents and Next Friends of Two Deceased Fonde Embryos, Embryo C and Embryo D v. The Center for Reproductive Medicine, P.C., and Mobile Infirmary Association d/b/a Mobile Infirmary Medical Center,” Justia: U.S. Law, February 16, 2024, <https://law.justia.com/cases/alabama/supreme-court/2024/sc-2022-0579.html>.

³ Ibid.

⁴ Ibid.

⁵ Ibid.

from the Protestant Christian perspective. In doing so, it seeks to provide a biblically faithful framework that can aid those in ministry in counseling couples who are wrestling with infertility and discerning whether to employ ART to grow their families.

Literature Review

This study engages sources from scientific research, legal documentation, and Christian theological reflection in order to address the complex questions raised by ART. By drawing from these diverse perspectives, the literature review will attempt to situate the discussion within both contemporary ethical discourse and the distinct commitments of Protestant theology.⁶ Although ART has been practiced for several decades, many Evangelical communities have only recently begun to reckon with its moral and theological implications.⁷

One significant voice in Evangelical ethics is Wayne Grudem, professor of theology and biblical studies at Phoenix Seminary. In his book, *Christian Ethics: An Introduction to Biblical*

⁶ The nature of Christian sources will only be in relation to Protestant Christianity. For the Roman Catholic stance on the use of ART please see: John Haas, “Begotten Not Made: A Catholic View of Reproductive Technology,” United States Conference of Catholic Bishops, United States Catholic Conference Inc., Washington, D.C., 1998, <https://www.usccb.org/issues-and-action/human-life-and-dignity/reproductive-technology/begotten-not-made-a-catholic-view-of-reproductive-technology>.

Haas notes that the 1987 church teaching known as “*Donum vitae*” teaches that if a given medical intervention *helps or assists* the marriage act to achieve pregnancy, it may be considered moral; if the intervention *replaces* the marriage act in order to engender life, it is not moral.” For the text of the *Donum vitae*, see https://www.vatican.va/roman_curia/congregations/cfaith/documents/rc_con_cfaith_doc_19870222_respect-for-human-life_en.html.

While affirming the *Donum vitae*, the implementation of new biomedical technologies prompted the 2008 development of *Dignitas personae* on the dignity of human life; for its text, see https://www.vatican.va/roman_curia/congregations/cfaith/documents/rc_con_cfaith_doc_20081208_dignitas-personae_en.html.

Finally, for an updated guideline for Catholic couples from the United States Conference of Catholic Bishops, see “Reproductive Technology Evaluation and Treatment of Infertility: Guidelines for Catholic Couples,” United States Conference of Catholic Bishops, 2020, https://www.usccb.org/resources/Reproductive%20Technology%20Guidelines%20for%20Catholic%20Couples%20updated_0.pdf.

⁷ Ericka Andersen, “How IVF Made Its Way into Evangelical Pro-Life Debates,” *Christianity Today*, January 8, 2024, <https://www.christianitytoday.com/2024/01/ivf-pro-life-ethics-christian-fertility-treatments-embryos/>.

Moral Reasoning, Grudem devotes an entire chapter to infertility and reproductive technology. He first examines the recurring theme of infertility throughout the Old Testament, addressing the grief and sorrow that can come from the inability to conceive a child. From this biblical foundation, he assesses the moral acceptability of reproductive technologies. The principles he uses to determine what forms of ART are morally acceptable include: “1. Modern medicine in general is morally good. 2. We should treat the unborn child as a human person from the moment of conception. 3. God intends that a child should be conceived by and born to a man and woman who are married to each other.”⁸

Concerning IVF, Grudem argues that its use can be morally permissible if it is pursued in a manner where the traditionally married couple is committed to ensuring all embryos will be given the opportunity to develop and be born, specifically not creating any embryos that would be discarded.⁹ This entails either implanting all embryos themselves or, if this is not possible, ensuring that unused embryos are adopted by another couple rather than destroyed. Because each embryo created is understood to be a human life from the moment of conception, discarding or infinitely freezing embryos is, in Grudem’s view, morally unacceptable.¹⁰

On this basis, Grudem concludes that IVF may be a legitimate moral option for Christian couples experiencing infertility, provided these criteria are met.¹¹ God desires couples to “be

⁸ Wayne A. Grudem, *Christian Ethics: An Introduction to Biblical Moral Reasoning* (Wheaton, IL: Crossway, 2018), 534.

⁹ *Ibid.*, 535.

¹⁰ *Ibid.*

¹¹ *Ibid.*

fruitful and multiply” (Gen. 1:28), and in the scriptural narratives, God graciously opened the wombs of previously barren women.¹² Grudem contends,

Sarah (Sarai) was unable to bear children to Abraham (Gen. 11:30; 16:1) for most of her life, until she miraculously bore Isaac in her old age (see Gen. 21:1–7). Jacob’s wife, Rachel, was unable to bear children for a long time after her marriage to Jacob (Gen. 29:31), as was Samson’s mother, the wife of Manoah (Judg. 13:2). Hannah, the mother of Samuel, cried out to the Lord in deep sorrow because of her infertility (1 Sam. 1:2–18). In the New Testament, Zechariah and Elizabeth “had no child, because Elizabeth was barren, and both were advanced in years” (Luke 1:7), but, again through God’s miraculous intervention, Elizabeth eventually gave birth to John the Baptist (vv. 57–66). These narrative examples portray overcoming infertility as something that pleases God, and it is often a manifestation of his special blessing on a couple.¹³

While these biblical examples do not reference modern medical interventions such as IVF, Grudem interprets them as evidence of God’s favorable regard toward the overcoming of infertility and the blessing of children, arguing modern medicine “can be used to overcome many diseases and disabilities today. We should view this as a good thing, and as something for which we can thank God.”¹⁴

Grudem’s views on IVF represent a minority view within Protestant evangelicalism. In a response published by *The Gospel Coalition*, Matthew Lee Anderson and Andrew T. Walker offer a pointed critique of Grudem’s ethical framework. While Grudem permits IVF as long as strict guidelines are followed, Anderson and Walker contend that the use of IVF separates the God-designed role of sex and procreation within a marriage.¹⁵ They argue that seeking children apart from the marital act of sexual union alters the very meaning of procreation, noting that

¹² Unless otherwise noted, all biblical passages referenced employ the English Standard Version. *The Holy Bible: English Standard Version* (Wheaton, IL: Crossway, 2016).

¹³ Wayne Grudem, “How IVF Can Be Morally Right,” *The Gospel Coalition*, April 25, 2019, <https://www.thegospelcoalition.org/article/ivf-morally-right/>.

¹⁴ *Ibid.*

¹⁵ Matthew Lee Anderson and Andrew T. Walker, “Breaking Evangelicalism’s Silence on IVF,” *The Gospel Coalition*, April 25, 2019, <https://www.thegospelcoalition.org/article/evangelicalisms-silence-ivf/>.

“aiming for children without sex changes the character of the latter, and with it the rest of our bodily life as well. IVF enshrines in the Christian moral imagination an attitude that, if applied consistently, would radically reconfigure not only our sexual ethics, but medical ethics as well.”¹⁶ More important than the separation of sex and procreation, Anderson and Walker raise concerns that IVF changes cultural conceptions of what constitutes a human life.¹⁷ Fertility clinics typically encourage the creation of multiple embryos, selectively implanting only those deemed “healthy” or genetically preferable to ensure a successful result. Anderson and Walker caution that “when humans become comfortable *making* other humans, we will doubtlessly begin to construct them in the image of our own preferences and desires.”¹⁸ In their view, IVF opens the door to undermining the dignity of the person.

The biggest difference between Grudem’s argument and that of Anderson and Walker is how they each view the role of medical advances. Grudem sees the advance of medicine as something that can be used to follow the biblical command of being fruitful and multiplying.¹⁹ Anderson and Walker, by contrast, warn that using medical technology to create life places human beings in a role reserved for God alone, displacing divine sovereignty with human autonomy.²⁰ While Grudem offers a way for couples experiencing infertility to grow their family in a way that can be done ethically, his framework requires absolute adherence to stringent

¹⁶ Ibid.

¹⁷ Ibid.

¹⁸ Ibid.

¹⁹ Wayne Grudem, “How IVF Can Be Morally Right,” The Gospel Coalition, April 25, 2019, <https://www.thegospelcoalition.org/article/ivf-morally-right/>.

²⁰ Matthew Lee Anderson and Andrew T. Walker, “Breaking Evangelicalism’s Silence on IVF,” The Gospel Coalition, April 25, 2019, <https://www.thegospelcoalition.org/article/evangelicalisms-silence-ivf/>.

guidelines in order to maintain moral coherence—a standard that may be difficult to achieve within the realities of clinical practice.

The legal complexities surrounding IVF and surrogacy have been brought to the forefront by the recent case *LePage v. The Center for Reproductive Medicine* before the Alabama Supreme Court.²¹ This ruling, decided 8-1 on February 16, 2024, has received national attention for its determination that embryos created through IVF may be regarded as children under Alabama state law.²² The decision arose in connection with wrongful death lawsuits after the Mobile Infirmary Medical Center failed to adequately secure cryogenic storage facilities, resulting in the destruction of several embryos.²³ By classifying embryos as legal persons, the court extended the protections of Alabama’s Wrongful Death Act to embryos created through ART.²⁴

The justices who voted to classify embryos as persons used the reasoning that unborn children are still children. Justice Tom Parker grounded his reasoning in explicitly Christian theological convictions. Drawing heavily on Genesis, Parker asserted that “even before birth, all human beings bear the image of God, and their lives cannot be destroyed without effacing glory.”²⁵ The lone dissenting judge, Justice Greg Cook, criticized the ruling as an overreach of

²¹ See Supreme Court of Alabama, “James LePage and Emily LePage, Individually and As Parents and Next Friends of Two Deceased LePage Embryos, Embryo A and Embryo B; and William Tripp Fonde and Caroline Fonde, Individually and As Parents and Next Friends of Two Deceased Fonde Embryos, Embryo C and Embryo D v. The Center for Reproductive Medicine, P.C., and Mobile Infirmary Association d/b/a Mobile Infirmary Medical Center,” Justia: U.S. Law, February 16, 2024, <https://law.justia.com/cases/alabama/supreme-court/2024/sc-2022-0579.html>.

²² Sierra Seabra, “The Supreme Court of Alabama’s IVF Ruling: The Redefining of Personhood,” *Juris Mentem Law Review*, March 3, 2024, <https://doi.org/10.57912/25814611>, 1.

²³ *Ibid.*

²⁴ *Ibid.*

²⁵ *Ibid.*, 2.

judicial power, observing that “no court--anywhere in the country--has reached the conclusion the main opinion reaches.”²⁶ The case has intensified debates concerning personhood, reproductive rights, and the sanctity of life, with implications for people pursuing IVF and surrogacy.

IVF has become so commonplace that it typically overshadows the use of gestational surrogates in conjunction with IVF.²⁷ As demand for surrogacy grows, more literature is focusing not only on the bioethical ramifications of surrogacy but also the legal issues that arise for the intended parents and gestational carriers. A 2021 article in *Gynecological and Reproductive Endocrinology and Metabolism* (GREM), entitled “Surrogacy—A Worldwide Demand: Implementation and Ethical Considerations,” authored by Adrian Ellenbogen, Dov Feldberg, and Vyacheslav Lokshin, examines surrogacy practices in select countries.²⁸ The authors survey the surrogacy process, including contractual agreements, the treatment of surrogate carriers, the influence of religious views, and the legislation of surrogacy around the world. They adopt the definition of surrogacy articulated by the 2005 European Society of Human Reproduction and Embryology (ESHRE) Task Force on Ethics and Law, which defines a surrogate as:

a woman who becomes pregnant, carries and delivers a child on behalf of another couple (intended or commissioning parents). The term surrogacy covers several situations. In the first situation (full surrogacy), the gestating woman has no genetic link to the child. In that case, (i) the gametes of both commissioning parents are used; (ii) both gametes come from donors (donation

²⁶ Supreme Court of Alabama.

²⁷ See the “History of Surrogacy” section for detailed definitions on each type of surrogacy. See also “US IVF Usage Increases in 2023, Leads to over 95,000 Babies Born,” American Society for Reproductive Medicine (ASRM), April 23, 2025, <https://www.asrm.org/news-and-events/asrm-news/press-releasesbulletins/us-ivf-usage-increases-in-2023-leads-to-over-95000-babies-born/>.

²⁸ Adrian Ellenbogen, Dov Feldberg, and Vyacheslav Lokshin, “Surrogacy—A Worldwide Demand. Implementation and Ethical Considerations,” *Gynecological and Reproductive Endocrinology and Metabolism* 2, no. 2 (June 14, 2021): 66–73, <https://gremjournal.com/wp-content/uploads/2021/06/01.pdf>.

of either supernumerary or de novo-created embryos); or (iii) one of the commissioning parents provides the gametes and a gamete donor the other. In the second situation (partial surrogacy), the surrogate mother has a genetic link by providing the oocyte. In either case, the gestating woman intends to relinquish the child to the commissioning parents, who want to assume parental responsibility.²⁹

Within their comparative analysis of how surrogacy is legislated in different countries, Ellenbogen, Feldberg, and Lokshin give particular attention to the legal landscape of surrogacy in the United States. The authors highlight the uneven application of surrogacy laws despite the 2000 Uniform Parentage Act, which sought to provide a standardized framework.³⁰ California has specific laws in place surrounding surrogacy, while other states present a fragmented approach. The authors note that other states “have legislation dealing with surrogacy agreements; these laws vary as to the legality of such agreements, their enforceability, and whether compensation is permitted, or they make surrogacy agreements unenforceable, and rely on common law where custody is disputed.”³¹ The authors conclude that “surrogacy is an issue that raises deep ethical and religious problems and considerations.”³² This recognition underscores the need for further theological reflection on the moral dimensions of surrogacy, particularly at the intersection of procreation, marriage, parenthood, and the commodification of human life.

History of In Vitro Fertilization (IVF)

ART is the all-encompassing term used to describe “all fertility treatments in which either eggs or embryos are handled outside of the body. In general, ART procedures involve

²⁹ F. Shenfield et al., “ESHRE Task Force on Ethics and Law 10: Surrogacy,” *Human Reproduction* 20, no. 10 (June 24, 2005): 2705–7, <https://doi.org/10.1093/humrep/dei147>.

³⁰ See National Conference of Commissioners on Uniform State Laws, “Uniform Parentage Act (2000),” https://acf.gov/sites/default/files/documents/ocse/dcl_00_93a.pdf.

³¹ Ellenbogen, Feldberg, and Lokshin, 69–70.

³² *Ibid.*, 72.

removing mature eggs from a woman’s ovaries using a needle, combining the eggs with sperm in the laboratory, and returning the embryos to the woman’s body or donating them to another woman.”³³ The most widely recognized and practiced ART procedure is IVF. The IVF process involves different stages, beginning with ovulation stimulation, then egg retrieval, followed by insemination, and finally embryo implantation.³⁴

IVF began under historical circumstances marked by scientific ambition and moral controversy. Early experimentation began with the work of Gregory Pincus, who would eventually be a member of the scientific team that created the birth control pill.³⁵ In 1931, Pincus experimented using the eggs of rabbits to determine that the eggs in these rabbits could be fertilized at any time, without ovulation needed, by using Thyroxin to mimic the ovulation process at any time in a female’s cycle.³⁶ Building upon such preliminary work, significant progress came through the collaborative efforts of Robert Edwards, Patrick Steptoe, and Jean Purdy, culminating in the birth of Louise Brown in 1978, the world’s first “Test Tube Baby.”³⁷

The media storm surrounding Brown’s birth created both excitement and apprehension. For some, it represented a remarkable triumph over infertility, hailed as “a glorious day for

³³ Centers for Disease Control, “Infertility: Frequently Asked Questions.”

³⁴ “In Vitro Fertilization (IVF),” Yale Medicine, accessed August 23, 2023, <https://www.yalemedicine.org/conditions/ivf>.

³⁵ Drew Pendergrass and Michelle Raji, “The Bitter Pill: Harvard and the Dark History of Birth Control,” *The Harvard Crimson*, September 28, 2017, <https://www.thecrimson.com/article/2017/9/28/the-bitter-pill/>.

³⁶ Gregory Pincus and E. V. Enzmann, “The Comparative Behavior of Mammalian Eggs in Vivo and in Vitro,” *Journal of Experimental Medicine* 62, no. 5 (November 1, 1935): 673–74, <https://doi.org/10.1084/jem.62.5.665>.

³⁷ Katharine Dow, “Looking into the Test Tube: The Birth of IVF on British Television,” *Medical History* 63, no. 2 (March 26, 2019): 189–208, <https://doi.org/10.1017/mdh.2019.6>.

women afflicted with this type of sterility Mrs. Brown has overcome.”³⁸ For others, it signaled an ominous shift in the relationship between sexuality, procreation, and family. British geneticist Robert J. Berry, for instance, cautioned, “We’re on a slippery slope. Western society is built around the family; once you divorce sex from procreation, what happens to the family?”³⁹ These divergent responses—celebratory and cautious—highlight the ongoing tension surrounding IVF. From its inception, IVF has raised not only medical and scientific questions but also ethical and theological concerns about the boundaries of human intervention in the processes of life.

IVF: Demographics and Cost

Since the birth of Louise Brown in 1978, it is estimated that over nine million babies have been born as a result of ART procedures.⁴⁰ In the United States alone, roughly one-third of people have some connection to fertility treatments, either personally or via friends and family.⁴¹ According to 2021 data published by the Centers for Disease Control and Prevention (CDC):

238,126 patients had 413,776 ART cycles performed at 453 reporting clinics in the United States during 2021, resulting in 91,906 live births (deliveries of one or more living infants) and 97,128 live born infants. Of the 413,776 ART cycles performed in 2021, 167,689 were egg or embryo banking cycles in which all resulting eggs or embryos were frozen for future use. Although the use of ART is still relatively rare as compared to the potential demand, its use has more than doubled over the past decade. Approximately 2.3% of all infants born in the United States every year are conceived using ART.⁴²

³⁸ Stuart Kunkler, letter to the editor, “Huxleian World.” *Time*, August 21, 1978, <https://content.time.com/time/subscriber/article/0,33009,919790,00.html>.

³⁹ “Medicine: To Fool (or Not) with Mother Nature,” *Time*, July 31, 1978, <https://time.com/archive/6880041/medicine-to-fool-or-not-with-mother-nature/>.

⁴⁰ Anne-Kristin Kuhnt and Jasmin Passet-Wittig, “Families Formed through Assisted Reproductive Technology: Causes, Experiences, and Consequences in an International Context,” *Reproductive Biomedicine & Society Online* 14, Special Issue (March 14, 2022): 289–96, <https://doi.org/10.1016/j.rbms.2022.01.001>.

⁴¹ Gretchen Livingston, “A Third of U.S. Adults Say They Have Used Fertility Treatments or Know Someone Who Has,” Pew Research Center, July 17, 2018, <https://www.pewresearch.org/short-reads/2018/07/17/a-third-of-u-s-adults-say-they-have-used-fertility-treatments-or-know-someone-who-has/>.

⁴² “Art Success Rates,” CDC: Assisted Reproductive Technology, U.S. Centers for Disease Control and Prevention, May 31, 2023, <https://www.cdc.gov/art/artdata/index.html>.

The likelihood that these numbers will increase in the years to come is high because the overall trend in women is to delay pregnancy into their thirties and beyond.⁴³

While this demographic shift has driven the demand for ART, the costs associated with IVF remain a significant barrier. A single IVF cycle—defined as “any process in which (1) an ART procedure is performed, (2) a woman has undergone ovarian stimulation or monitoring with the intent of having an ART procedure, or (3) frozen embryos have been thawed with the intent of transferring them to a woman”—often does not guarantee success, meaning that multiple cycles are frequently necessary.⁴⁴ As a result, these procedures can be costly. Recent estimates for a single cycle of IVF place the cost between \$15,000 and \$20,000, with expenses sometimes exceeding \$30,000.⁴⁵ These numbers greatly vary by state. Although a limited number of insurance companies have begun to include fertility treatments as part of their coverage, the majority do not, so most couples choosing to pursue IVF are required to pay out of pocket.⁴⁶ Beyond the emotional strain of infertility itself, the substantial financial demands of IVF compound the stress experienced by couples, who may face the difficult prospect of investing tens of thousands of dollars in an uncertain outcome.

⁴³ Katherine Tierney, “The Future of Assisted Reproductive Technology Live Births in the United States,” *Population Research and Policy Review* 41, no. 5 (July 18, 2022): 2290, <https://doi.org/10.1007/s11113-022-09731-5>.

⁴⁴ “Fact Sheet: In Vitro Fertilization (IVF) Use across the United States,” U.S. Department of Human Services, Page Freezer (HHS Archive), March 13, 2024, <https://public3.pagefreezer.com/browse/HHS.gov/02-01-2025T05:49/https://www.hhs.gov/about/news/2024/03/13/fact-sheet-in-vitro-fertilization-ivf-use-across-united-states.html>.

⁴⁵ *Ibid.*

⁴⁶ *Ibid.*

History of Surrogacy

Although surrogacy is most commonly used today in conjunction with IVF, the practice itself has a lengthy history, dating back to biblical times. The story of Abraham and Sarah, who turned to Sarah’s maidservant Hagar to bear a child (Gen. 16), is the most cited biblical example of surrogacy. In the Ancient Near Eastern context, using a servant as a surrogate was a common custom among infertile women in order to provide an heir.⁴⁷ This practice is referred to as traditional surrogacy, in which the surrogate mother is inseminated, “with the intended father’s sperm, making her a genetic parent along with the intended father.”⁴⁸

Traditional surrogacy is not as common today due to the advances made in ART, specifically IVF. The practice of surrogacy has shifted toward what is known as gestational surrogacy, defined as an arrangement “in which an embryo from the intended parents or from a donated oocyte or sperm is transferred to the surrogate uterus. In gestational surrogacy, the woman who carries the child has no genetic connection to the child.”⁴⁹ In 1985, the first successful gestational surrogacy baby was born in the United States.⁵⁰ Gestational surrogacy is divided into two categories, commercial and altruistic.

Commercial surrogacy requires “payment to a woman or an agency for her to carry a child.”⁵¹ Altruistic surrogacy describes a situation in which “a woman volunteers to carry a child

⁴⁷ N. M. Sarna, *The JPS Torah Commentary Genesis* (Philadelphia, PA: The Jewish Publication Society, 1989), 119.

⁴⁸ Nayana Hitesh Patel et al., “Insight into Different Aspects of Surrogacy Practices,” *Journal of Human Reproductive Sciences* 11, no. 3 (2018): 212, https://doi.org/10.4103/jhrs.jhrs_138_17.

⁴⁹ *Ibid.*

⁵⁰ *Ibid.*, 213.

⁵¹ Heather Zeiger, “When Baby-Making Takes Three: You, Me, and She,” *Christian Research Institute*, last modified August 19, 2025, <https://www.equip.org/articles/baby-making-takes-three/>.

for the couple.”⁵² The ethical, legal, and theological debates surrounding surrogacy often pivot upon this distinction, raising questions not only about the commodification of reproduction but also about the meaning of parental responsibility.

Surrogacy: Legalities and Cost

Surrogacy, in all forms, is fraught with legal issues mainly due to a lack of clear governmental legislation in the United States and abroad. On an international level, countries such as France, Germany, Italy, and Spain have categorically banned surrogacy in all forms.⁵³ By contrast, nations including the United Kingdom, the Netherlands, and Belgium prohibit commercial surrogacy but permit altruistic surrogacy.⁵⁴ Ukraine and Russia have legalized commercial surrogacy, creating an international market for couples choosing the route of international surrogacy abroad.⁵⁵ In the United States, no federal laws govern surrogacy; instead, legislative measures differ by state.⁵⁶ Most states do not have specific legislation regarding surrogacy; however, “14 states (among which Texas and California) have targeted surrogacy legislation in place; 12 states have strict limitations in place (such as deeming contracts void and unenforceable); 3 states ban surrogacy altogether (Louisiana, Michigan and Nebraska).”⁵⁷ The financial dimensions of surrogacy in many cases exceed the costs associated with IVF. In the

⁵² Ibid.

⁵³ Valeria Piersanti et al., “Surrogacy and ‘Procreative Tourism’. What Does the Future Hold from the Ethical and Legal Perspectives?,” *Medicina* 57, no. 1 (2021): 47, <https://doi.org/10.3390/medicina57010047>.

⁵⁴ Ibid.

⁵⁵ Ibid.

⁵⁶ Ibid.

⁵⁷ Ibid., 51.

United States, a surrogacy arrangement costs approximately \$120,000- \$150,000.⁵⁸ Of this amount, surrogates typically receive \$25,000 - \$35,000 as compensation for their role.⁵⁹ If an egg donor other than the surrogate is used, expenses may increase by an additional \$10,000. Additional costs arise from agency fees, medical procedures, legal contracts, and insurance coverage.⁶⁰ The majority of health insurance companies exclude surrogacy from benefits, requiring intended parents to shoulder the financial burden directly.⁶¹ Even in cases of altruistic surrogacy—where the surrogate volunteers with no expectation of payment—there are still required costs that the intended parents must cover. The surrogate’s medical bills must be paid by the intended parents, including bills for any pregnancy complications that arise.

Invariably, surrogacy contains transactional elements, regardless of the nature of the surrogate agreement. This transactional nature raises moral and ethical issues surrounding not only the child but also the role of the surrogate. Thomas Frank, writing for the *Wall Street Journal*, critiques the commodifying tendencies inherent in surrogacy:

When money is exchanged for pregnancy, some believe, surrogacy comes close to organ-selling, or even baby-selling. It threatens to commodify not only babies, but women as well, putting their biological functions up for sale like so many Jimmy Choos [expensive women’s designer shoes]. If surrogacy ever becomes a widely practiced market transaction, it will probably make pregnancy into just another dirty task for the working class, with wages driven down and wealthy couples hiring the work out because it’s such a hassle to be pregnant.⁶²

⁵⁸ Marcin Smietana, “Affective De-Commodifying, Economic De-Kinning: Surrogates’ and Gay Fathers’ Narratives in U.S. Surrogacy,” *Sociological Research Online* 22, no. 2 (May 2017), 3, <https://doi.org/10.5153/sro.4312>.

⁵⁹ Ibid.

⁶⁰ Ibid.

⁶¹ Beth Braverman, “How Much Surrogacy Costs and How to Pay for It,” U.S. News and World Report, May 30, 2023, <https://money.usnews.com/money/personal-finance/family-finance/articles/how-much-surrogacy-costs-and-how-to-pay-for-it>.

⁶² Thomas Frank, “Rent-a-Womb Is Where Market Logic Leads,” *The Wall Street Journal*, December 10, 2008, <https://www.wsj.com/articles/SB122887061388693229>.

Comparing surrogacy to organ trafficking or the sale of children could be viewed as extreme, but Frank’s critique highlights a pressing concern: surrogacy could push the physical and emotional burdens of pregnancy from the wealthy to economically vulnerable women. This reality underscores the need for theological and ethical reflection on the dignity of women and the dangers of commodifying the embodied processes of reproduction.

Biblical Response

An in-depth response on how the church and believers should respond to the use of ART must begin with recognition of the pain and loneliness that couples who experience infertility face. As one author has noted, “infertility is an unfortunate result of living in a fallen world where our mortal bodies do not cooperate with our God-given desires.”⁶³ In the United States, infertility is a significant reality: among “married women aged 15-49 with no prior births,” 19 percent report difficulty conceiving after one year of trying, and of this group, 26 percent of women are unable to conceive or struggle to carry a pregnancy to term.⁶⁴

Within the church, couples navigating infertility may encounter “pitied glances, prodding questions, empty attempts to pacify, or judgmental opinions readily offered.”⁶⁵ It is important that pastors and Christian leaders become well-versed in the ethical and moral issues surrounding the use of ART in order to shepherd well their congregants who seek biblical counsel on how

⁶³ Zeiger.

⁶⁴ “Infertility: Frequently Asked Questions,” CDC: Assisted Reproductive Health, U.S. Centers for Disease Control and Prevention, May 15, 2024, <https://www.cdc.gov/reproductivehealth/infertility/index.htm>.

⁶⁵ Mary Elizabeth Gresham, “Inconceivable: An Analysis of Assisted Reproductive Technology for the Church” (thesis, Liberty University, 2020), <https://digitalcommons.liberty.edu/cgi/viewcontent.cgi?article=2068&context=honors>, 5.

they should move forward amid the pain of infertility. The following analysis examines the principles that must be put in place in order to create an ethical response to the use of ART.

Marriage as the Context for Procreation

To develop an ethical response to the use of ART, the first principle is that it should align with the traditional view of marriage, which is defined by the National Association of Evangelicals as “a God-ordained, covenant relationship between a man and a woman.”⁶⁶ From creation onward, God established marriage as the context in which His command to “be fruitful and multiply” (Gen. 1:28) is to be fulfilled. The use of ART outside of a marriage relationship between one man and one woman is incompatible with a biblical worldview. Accordingly, the pursuit of ART by same-sex couples, transgender individuals, or those seeking single parenthood by choice falls outside the biblical vision of marriage and family.

While such applications of ART may be normalized in secular culture, they remain incompatible with the biblical understanding of marriage and procreation. Using ART to achieve single parenthood eliminates the God-ordained requirement of procreation with both a mother and father. If it is not acceptable for same sex couples to ethically use ART, this argument also goes to those who do not have both a man and a woman who will be involved in raising the child created.⁶⁷

⁶⁶ “God Defined Marriage,” National Association of Evangelicals, June 26, 2015, <https://www.nae.org/god-defined-marriage/>.

⁶⁷ This is only referring to the conception and birth of a child. Adoption does not factor into this conversation because adoption is not the creation of a child for the purpose of a couple, like IVF and surrogacy are.

Infertility and Suffering

Matthew Arbo, a research fellow in Christian Ethics at The Ethics and Religious Liberty Commission, has spoken extensively with infertile couples who have sought pastoral guidance. Arbo notes, “One particular wound is recurring: people, particularly pastors, failing to meet them in their pain and resorting instead to some modified wives’ tale to relieve anxiety.”⁶⁸ Yet through the stories of Abraham and Sarah, Hannah, and Zechariah and Elizabeth, Scripture demonstrates that God does not overlook such couples, and that He works even through their longing and lament. By contrast, the case of Hagar and Sarah provides a strong biblical polemic against surrogacy as a solution. Abraham ultimately agrees to the surrogacy arrangement proposed by Sarah in violation of God’s promise to provide an heir for Abraham. The fallout from this surrogacy arrangement bears the same problematic hallmarks of surrogacy present in modern times.

IVF and the Dignity of Human Life

For married couples who experience infertility, certain applications of IVF may be consistent with biblical ethics, provided they honor the sanctity of human life. The creation of embryos is the greatest ethical concern involved with IVF. Because embryos are created with both the egg and sperm coming together, just as it would be with natural conception, each embryo must be regarded as a distinct human life, bearing the image of God. God makes it clear that all life is sacred, including those already born and those who can be born (Gen. 9:6, Ps. 139:13-16, and Jer. 1:5). God has commanded His image bearers to subdue the earth (Gen. 1:28).

⁶⁸ Matthew Arbo, “Pastoring Those Struggling with Infertility,” *Credo Magazine*, July 25, 2018, <https://credomag.com/2018/07/pastoring-those-struggling-with-infertility/>.

In this light, the responsible use of medical advancements—including reproductive technologies—can be seen as a valid expression of that mandate, as long as such use respects the sanctity of human life and aligns with the biblical view of procreation within marriage.

The practical challenges of following these guidelines are considerable. Many fertility clinics prefer creating multiple embryos to increase the chances of a successful birth. The primary focus for these clinics is achieving positive outcomes. Couples who opt to limit embryo creation might face resistance from clinics due to lower success rates and fewer treatment options. Therefore, while IVF may be morally acceptable in these circumstances, couples choosing to pursue Grudem’s ethical stance on IVF need to understand both the theological commitments and the medical realities involved in this decision. Thus, biblically faithful use of IVF requires practices that safeguard the dignity of every embryo. Fertilization should be limited to a small number of eggs, ideally one egg at a time, to avoid the need for cryopreservation.⁶⁹ When embryos are created, the number of embryos implanted should be limited; this is safer for the woman and avoids the possibility of selective reduction, which is not morally permissible.⁷⁰ No embryos, regardless of their genetic makeup, should be discarded.⁷¹ In cases where surplus embryos remain, embryo adoption may provide a redemptive alternative, allowing other couples facing infertility to bear children. While not as ideal as the biological parents implanting all

⁶⁹ Matthew Arbo, *Walking through Infertility: Biblical, Theological, and Moral Counsel for Those Who Are Struggling* (Wheaton, IL: Crossway, 2018), 93.

⁷⁰ Selective reduction refers to “a medical procedure used to reduce a multiple pregnancy, often a multiple pregnancy induced by in vitro fertilization or drug therapy. In such instances, healthy embryos are sacrificed in order to maximize the chances of survival of the remaining embryos or to allow the mother to choose the number of babies she wishes to deliver.” Elizabeth Villiers Gemmette, “Selective Pregnancy Reduction: Medical Attitudes, Legal Implications, and a Viable Alternative,” *Journal of Health Politics, Policy and Law* 16, no. 2 (1991): 383, <https://doi.org/10.1215/03616878-16-2-383>.

⁷¹ Gresham, 23.

embryos, embryo adoption shows compassion to infertile couples longing for a child and simultaneously honors the dignity of human life.

Surrogacy and the Commodification of Life

While IVF may, under certain conditions, be practiced in a way that respects biblical principles, surrogacy presents deeper and more intractable concerns.⁷² Unlike adoption, which responds to the existing needs of children and is oriented toward their well-being, surrogacy intentionally brings a child into existence to fulfill the desires of intended parents through a transactional arrangement. The aforementioned biblical example of traditional surrogacy demonstrates this point perfectly: Abraham desired an heir, Sarah desired to be a mother, and the maidservant Hagar bore the costs of bearing a child.

Surrogacy differs from the use of IVF alone for a couple to create embryos because the embryos created are intended for the biological parents to bear and raise. Surrogacy risks commodifying both the woman who carries the child and the child herself. Surrogacy arrangements “treat the creation of a person as the means to the gratification of the interests of others, rather than respect the child as an end in himself. The surrogate mother, ‘by the very nature of the transaction,’ cannot ‘make a pretense to valuing the child in and for himself, since she would not otherwise be creating the child but for the monetary and other . . . considerations [that] she receives under the surrogate mother contract.’”⁷³

⁷² It should be noted that having to use ART is never the most ideal option for any couple. The reality is that the world and everything in it has been marred by sin. This includes infertility and adoption. Not all couples are called to adopt, so the use of ART can be a means for faithful couples to pursue biological parenthood while also ensuring that all life is valued.

⁷³ Bernard G. Prusak, “What Are Parents for?: Reproductive Ethics after the Nonidentity Problem,” *Hastings Center Report* 40, no. 2 (2010): 40, <https://muse.jhu.edu/article/376763>.

This argument is easy to make for commercial surrogacy, but some in the Christian community have defended altruistic surrogacy as a means to bless those struggling with infertility. In a *Christianity Today* article, Christian women who have participated in altruistic surrogacy claimed that altruistic surrogacy is a calling. One woman phrased her desire to be a surrogate as a feeling of “deep compassion for families stung by infertility. She felt called to help, so much so that she offered up her womb to two little embryos from a fellow couple struggling to conceive.”⁷⁴ Yet even when undertaken with sincere motives, the arrangement remains transactional in nature: a woman’s body is used for the sake of another’s desire. There is the very real “potential for abuse, and it does not change the fact that a woman’s body is being used for instrumental purposes.”⁷⁵ For all the stories of women volunteering to carry the child of a friend or family member that end in a beautiful baby where all involved are bonded together for life, there are stories of altruistic surrogacy gone wrong, where not only was a relationship marred beyond repair, but the health and well-being of the altruistic gestational carrier was permanently damaged.⁷⁶ One need look no further than the example of Abraham, Sarah, and Hagar to see the negative outcomes of surrogacy on human relationships. The value of human life is paramount to any biblical ethic. Surrogacy does not hold to a value of human life that is in line with Scripture because both the gestational carrier and the child are seen as a commodity, rather than human beings to be cherished as image bearers of God. The desire to have children

⁷⁴ Kate Shellnutt, “America’s Surrogacy Bump: Is Fertility a Blessing to Be Shared?,” *Christianity Today*, February 20, 2018, <https://www.christianitytoday.com/ct/2018/march/surrogacy-surge-us-christians-bioethics-ivf-reproduction.html>.

⁷⁵ Zeiger.

⁷⁶ Jennifer Lahl has done extensive work on this topic, including the film *Breeders: A Subclass of Women?*, where interviews including the negatives of altruistic surrogacy are highlighted.

can be all-consuming, but when considering the ethical issues involved in the surrogacy process, “surrogacy, no matter how well intentioned, is a case of using inappropriate means to try to alleviate a very real loss.”⁷⁷

Upholding the Value of Human Life

The overarching principle is that all human life—whether embryos in the lab, children in the womb, or women carrying pregnancies—must be honored as sacred as they bear the image of God. The church must therefore approach ART with both compassion and conviction: compassion for those who grieve the pain of infertility and conviction that not every means of alleviating suffering is biblically faithful. Thus, while certain forms of IVF may be practiced in a way that aligns with Christian ethics, surrogacy cannot be reconciled with the biblical vision of life, marriage, and procreation.

Conclusion

Addressing infertility and the ethical use of ART is a complex and delicate topic. In many Evangelical Christian circles, marriage and family are considered a high priority and often viewed as sacred appointments ordained by God.⁷⁸ For couples who do not feel called to adopt, ART may appear to offer a path toward creating a family.⁷⁹ While the use of ART in any form is

⁷⁷ Zeiger.

⁷⁸ Stephanie Kramer, “White Evangelicals More Likely than Other Christians to Say People Should Prioritize Marriage, Procreation,” Pew Research Center, December 16, 2021, <https://www.pewresearch.org/short-reads/2021/12/16/white-evangelicals-more-likely-than-other-christians-to-say-people-should-prioritize-marriage-procreation/>.

⁷⁹ Adoption truly is a calling; not all couples are called to adopt. Telling couples experiencing infertility to just pursue adoption, if they do not feel called to it, is not a helpful way to advise or counsel the couple.

outside the traditional biblical understanding of sex and procreation within marriage, there is a way in which IVF can be done that is still consistent with the biblical ethics of human life.

The most important criterion for Christians considering IVF is that the couple must not contradict the traditional biblical view of marriage. Beyond this foundational standard, couples must take great care in how embryos are created and commit to pursuing life for each created embryo. Under no circumstances should any embryos be discarded, regardless of their genetic grade or makeup, and couples must resist freezing embryos indefinitely. In a world marred by sin, this is not a perfect solution for couples experiencing infertility, but it is one that takes the biblical ethic of life into account. While this approach may not align with standard fertility clinic procedures, Christian couples must make their convictions clear to ensure that the sanctity of life is honored throughout the process.

The same cannot be said for surrogacy. While the surrogacy process does involve the use of IVF, the embryo creation and implantation process brings a third party, the surrogate, into the creation of a child. This process introduces moral and theological complications that violate the one-flesh covenant of marriage and the biblical view of procreation. Even in altruistic surrogacy agreements, there is still an understanding that there will be some form of payment for the surrogate's services. Both the surrogate and the child risk being reduced to commodities. The transactional nature of a surrogacy agreement, and the possible devaluing of not only the surrogate's body but also the child being created, do not offer a way to practice surrogacy that meets a biblically faithful ethic that views all human life as God's created image bearers.

The use of ART raises profound moral questions because it involves the creation and possible destruction of human life. Addressing these issues requires theological wisdom and pastoral sensitivity. Infertility can be a source of deep grief, often misunderstood by those who

have not experienced it. Churches and ministry leaders must become more informed about the ethical complexities of ART to guide couples toward choices that reflect compassion, but that never cross lines God has drawn. For Christian couples experiencing infertility, being directed towards IVF to grow their family is a means of being fruitful and multiplying. However, many couples are not well versed in the process of IVF or in how to pursue IVF in a manner that makes the creation of human life paramount. Having ministerial staff more informed about the processes involved in using ART can offer these couples biblical guidance on how to proceed. By grounding decisions in a robust biblical ethic that honors life, marriage, and God's sovereignty, Christian couples can pursue parenthood without compromising their faith or the sacredness of human life.

This is a topic that is ripe for further research. Areas of further research to explore in relation to the ethics of using ART are the parallels and differences between Catholic and Protestant views surrounding the sanctity of life. The position in this paper has been to uphold both the sanctity of life and the dignity of life, which are also notable Catholic positions. However, the application of these principles may differ. For example, the Catholic perspective takes further the idea that procreation must occur not only within the biblical understanding of marriage, but also only within the intimate marital union of husband and wife, though, as seen in the Anderson and Walker article, this position is held by some Protestants. The overarching concern is whether IVF violates the designs and sovereignty of God in creating human beings. By contrast, many parallels may be discovered, including prohibitions against (1) selecting and destroying embryos, (2) reviving the practice of eugenic selection through IVF by couples fully capable of reproduction, (3) freezing and ignoring embryos indefinitely, (4) violating God's design for families, which excludes gay couples and intentional single parents, and (5) using

ART for nefarious purposes such as human trafficking, organ trafficking, and child predators. Examining the moral complexities of ART in such a study could foster interfaith dialogue and greater unity of thought on this subject.

Bibliography

- American Society for Reproductive Medicine. “US IVF Usage Increases in 2023, Leads to over 95,000 Babies Born.” April 22, 2025. <https://www.asrm.org/news-and-events/asrm-news/press-releasesbulletins/us-ivf-usage-increases-in-2023-leads-to-over-95000-babies-born/>.
- Andersen, Ericka. “How IVF Made Its Way into Evangelical Pro-Life Debates.” *Christianity Today*, January 8, 2024. <https://www.christianitytoday.com/2024/01/ivf-pro-life-ethics-christian-fertility-treatments-embryos/>.
- Anderson, Matthew Lee, and Andrew T. Walker. “Breaking Evangelicalism’s Silence on IVF.” The Gospel Coalition. April 25, 2019. <https://www.thegospelcoalition.org/article/evangelicalisms-silence-ivf/>.
- Arbo, Matthew. “Pastoring Those Struggling with Infertility.” *Credo Magazine*, July 25, 2018. <https://credomag.com/2018/07/pastoring-those-struggling-with-infertility/>.
- . *Walking through Infertility: Biblical, Theological, and Moral Counsel for Those Who Are Struggling*. Wheaton, IL: Crossway, 2018.
- Braverman, Beth. “How Much Surrogacy Costs and How to Pay for It.” *U.S. News and World Report*, May 30, 2023. <https://money.usnews.com/money/personal-finance/family-finance/articles/how-much-surrogacy-costs-and-how-to-pay-for-it>.
- Congregation for the Doctrine of the Faith. “Instruction *Dignitas Personae* on Certain Bioethical Questions.” Approved September 8, 2008. *AAS* 100 (2008): 858–887. https://www.vatican.va/roman_curia/congregations/cfaith/documents/rc_con_cfaith_doc_20081208_dignitas-personae_en.html.
- Congregation for the Doctrine of the Faith. “Instruction on Respect for Human Life in Its Origin and on the Dignity of Procreation.” Approved February 22, 1987. *AAS* 80 (1988): 70–102. https://www.vatican.va/roman_curia/congregations/cfaith/documents/rc_con_cfaith_doc_19870222_respect-for-human-life_en.html.
- Dow, Katharine. “Looking into the Test Tube: The Birth of IVF on British Television.” *Medical History* 63, no. 2 (March 26, 2019): 189–208. <https://doi.org/10.1017/mdh.2019.6>.
- Ellenbogen, Adrian, Dov Feldberg, and Vyacheslav Lokshin. “Surrogacy - A Worldwide Demand. Implementation and Ethical Considerations.” *Gynecological and Reproductive Endocrinology and Metabolism* 2, no. 2 (June 14, 2021): 66–73. <https://gremjournal.com/wp-content/uploads/2021/06/01.pdf>.

Frank, Thomas. “Rent-a-Womb Is Where Market Logic Leads.” *The Wall Street Journal*, December 10, 2008. <https://www.wsj.com/articles/SB122887061388693229>.

Gemmette, Elizabeth Villiers. “Selective Pregnancy Reduction: Medical Attitudes, Legal Implications, and a Viable Alternative.” *Journal of Health Politics, Policy and Law* 16, no. 2 (1991): 383–95. <https://doi.org/10.1215/03616878-16-2-383>.

Gresham, Mary Elizabeth. “Inconceivable: An Analysis of Assisted Reproductive Technology for the Church.” Thesis, Liberty University, 2020. <https://digitalcommons.liberty.edu/cgi/viewcontent.cgi?article=2068&context=honors>.

Grudem, Wayne. *Christian Ethics: An Introduction to Biblical Moral Reasoning*. Wheaton, IL: Crossway, 2018.

———. “How IVF Can Be Morally Right.” The Gospel Coalition. April 25, 2019. <https://www.thegospelcoalition.org/article/ivf-morally-right/>.

Haas, John. “Begotten Not Made: A Catholic View of Reproductive Technology.” United States Conference of Catholic Bishops. United States Catholic Conference Inc., Washington, D.C., 1998. <https://www.usccb.org/issues-and-action/human-life-and-dignity/reproductive-technology/begotten-not-made-a-catholic-view-of-reproductive-technology>.

Klaus, Hanna. “Reproductive Technology Evaluation and Treatment of Infertility: Guidelines for Catholic Couples.” NFPP/US Conference of Catholic Bishops. Washington, DC: USCCB, 2020. https://www.usccb.org/resources/Reproductive%20Technology%20Guidelines%20for%20Catholic%20Couples%20updated_0.pdf.

Kramer, Stephanie. “White Evangelicals More Likely than Other Christians to Say People Should Prioritize Marriage, Procreation.” Pew Research Center. December 16, 2021. <https://www.pewresearch.org/short-reads/2021/12/16/white-evangelicals-more-likely-than-other-christians-to-say-people-should-prioritize-marriage-procreation/>.

Kuhnt, Anne-Kristin, and Jasmin Passet-Wittig. “Families Formed through Assisted Reproductive Technology: Causes, Experiences, and Consequences in an International Context.” *Reproductive Biomedicine & Society Online* 14, Special Issue (March 14, 2022): 289–296. <https://doi.org/10.1016/j.rbms.2022.01.001>.

Kunkler, Stuart. Letter to the Editor. “Huxleian World.” *Time*, August 21, 1978. <https://content.time.com/time/subscriber/article/0,33009,919790,00.html>.

Livingston, Gretchen. “A Third of U.S. Adults Say They Have Used Fertility Treatments or Know Someone Who Has.” Pew Research Center. July 17, 2018. <https://www.pewresearch.org/short-reads/2018/07/17/a-third-of-u-s-adults-say-they-have-used-fertility-treatments-or-know-someone-who-has/>.

- Mathews, Dan, and Samantha Mathews. “We Are Dan and Sam.” YouTube, 2020. https://www.youtube.com/channel/UCcJ0xWWzTn-q3EFd16gkO_Q.
- “Medicine: To Fool (or Not) with Mother Nature.” *Time*, July 31, 1978. <https://time.com/archive/6880041/medicine-to-fool-or-not-with-mother-nature/>.
- National Association of Evangelicals. “God Defined Marriage.” June 26, 2015. <https://www.nae.org/god-defined-marriage/>.
- National Conference of Commissioners on Uniform State Laws. “Uniform Parentage Act (2000).” https://acf.gov/sites/default/files/documents/ocse/dcl_00_93a.pdf.
- Patel, Nayana Hitesh, Yuvraj Digvijaysingh Jadeja, Harsha Karsan Bhadarka, Molina Niket Patel, Niket Hitesh Patel, and Nilofar Rahematkhan Sodagar. “Insight into Different Aspects of Surrogacy Practices.” *Journal of Human Reproductive Sciences* 11, no. 3 (2018): 212–218. https://doi.org/10.4103/jhrs.jhrs_138_17.
- Pendergrass, Drew, and Michelle Raji. “The Bitter Pill: Harvard and the Dark History of Birth Control.” *The Harvard Crimson*, September 28, 2017. <https://www.thecrimson.com/article/2017/9/28/the-bitter-pill/>.
- Piersanti, Valeria, Francesca Consalvo, Fabrizio Signore, Alessandro Del Rio, and Simona Zaami. “Surrogacy and ‘Procreative Tourism’. What Does the Future Hold from the Ethical and Legal Perspectives?” *Medicina* 57, no. 1 (2021): 47–63. <https://doi.org/10.3390/medicina57010047>.
- Pincus, Gregory, and E. V. Enzmann. “The Comparative Behavior of Mammalian Eggs in Vivo and in Vitro.” *Journal of Experimental Medicine* 62, no. 5 (November 1, 1935): 665–675. <https://doi.org/10.1084/jem.62.5.665>.
- Prusak, Bernard G. “What Are Parents for?: Reproductive Ethics after the Nonidentity Problem.” *Hastings Center Report* 40, no. 2 (2010): 37–47. <https://doi.org/10.1353/hcr.0.0244>.
- Sarna, N. M. *The JPS Torah Commentary Genesis*. Philadelphia, PA: The Jewish Publication Society, 1989.
- Seabra, Sierra. “The Supreme Court of Alabama’s IVF Ruling: The Redefining of Personhood.” *Juris Mentem Law Review*. March 3, 2024. <https://doi.org/10.57912/25814611>.
- Shellnutt, Kate. “America’s Surrogacy Bump: Is Fertility a Blessing to Be Shared?” *Christianity Today*, February 20, 2018. <https://www.christianitytoday.com/ct/2018/march/surrogacy-surge-us-christians-bioethics-ivf-reproduction.html>.

- Shenfield, F., G. Pennings, J. Cohen, P. Devroey, G. de Wert, and B. Tarlatzis. “ESHRE Task Force on Ethics and Law 10: Surrogacy.” *Human Reproduction* 20, no. 10 (June 24, 2005): 2705–7. <https://doi.org/10.1093/humrep/dei147>.
- Smietana, Marcin. “Affective De-Commodifying, Economic De-Kinning: Surrogates’ and Gay Fathers’ Narratives in U.S. Surrogacy.” *Sociological Research Online* 22, no. 2 (May 2017). <https://doi.org/10.5153/sro.4312>.
- Supreme Court of Alabama, “James LePage and Emily LePage, Individually and As Parents and Next Friends of Two Deceased LePage Embryos, Embryo A and Embryo B; and William Tripp Fonde and Caroline Fonde, Individually and As Parents and Next Friends of Two Deceased Fonde Embryos, Embryo C and Embryo D v. The Center for Reproductive Medicine, P.C., and Mobile Infirmery Association d/b/a Mobile Infirmery Medical Center,” Justia: U.S. Law, February 16, 2024, <https://law.justia.com/cases/alabama/supreme-court/2024/sc-2022-0579.html>.
- Tierney, Katherine. “The Future of Assisted Reproductive Technology Live Births in the United States.” *Population Research and Policy Review* 41, no. 5 (July 18, 2022): 2289–2309. <https://doi.org/10.1007/s11113-022-09731-5>.
- U.S. Centers for Disease Control and Prevention. “Art Success Rates.” CDC: Assisted Reproductive Technology (ART). February 7, 2025. https://www.cdc.gov/art/success-rates/?CDC_AAref_Val=https://www.cdc.gov/art/artdata/index.html.
- . “Infertility: Frequently Asked Questions.” CDC: Reproductive Health. May 15, 2024. https://www.cdc.gov/reproductive-health/infertility-faq/?CDC_AAref_Val=https://www.cdc.gov/reproductivehealth/infertility/index.htm.
- U.S. Department of Human Services. “Fact Sheet: In Vitro Fertilization (IVF) Use across the United States.” Page Freezer (HHS Archive). March 14, 2024. <https://public3.pagefreezer.com/browse/HHS.gov/02-01-2025T05:49/https://www.hhs.gov/about/news/2024/03/13/fact-sheet-in-vitro-fertilization-ivf-use-across-united-states.html>.
- Yale Medicine. “In Vitro Fertilization (IVF).” Accessed August 23, 2023. <https://www.yalemedicine.org/conditions/ivf>.
- Zeiger, Heather. “When Baby-Making Takes Three: You, Me, and She.” Christian Research Institute. Last modified August 19, 2025. <https://www.equip.org/articles/baby-making-takes-three/>.