

ASSISTED REPRODUCTIVE TECHNOLOGY BETWEEN MEDICINE, RELIGION AND LAW

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Abstract

The new, the engine that allows us to evolve. That is what we do by nature: we figure out how things work and we make new steps, over and over. We created vaccines to help prevent diseases and, in the future, maybe we are about to create a human being outside the womb. It is a sin, it is a legal thing, it is moral? Are we guilty of considering ourselves gods? Medically assisted human reproduction is a piece of a puzzle, of an engine that can separate us or bring us together, that can raise or erase family boundaries, give us rights or put us on the wall of morality. Assisted reproductive technologies are medical procedures and their role is, first of all, to help people who experience some difficulties or who suffer an inability to have biological children of their own. But the access to the experience of pregnancy is expanded by the big new development to the potential of those reproductive technologies. And, as always, there is a price for that, for everything that we create or update, and those challenges go far beyond medicine, science or pure technique and we are forced to wonder about moral, religious or legal limitations.

Keywords: *artificial insemination (AIns.), assisted reproductive technology/ies (ART/s), cross-border reproductive care (CBRC), embryo donation, filiation, family law, gestation for another, intracytoplasmic sperm injection (ICSI), intrauterine insemination (IUI), in vitro fertilisation (IVF), maternity of substitution, medically assisted reproduction (MAR), principle of the best interests of the child, posthumous reproduction, right to private and family life, selective foetal reduction (SFR), surrogacy, third donor.*

„Dare! I have conquered the world!”¹

1. Introduction

The evolution of man and the relationship between man and society are elements that have made and continue to make scientific progress possible, and everything is raised to power in growing need, natural or wilful, to overcome the old and to pass scientific, medical, but also moral and legal barriers. Our times propel us, whether we want or not, on the road of knowledge, a path that sometimes makes us move away from prudence, from rules and to cross the traditional borders of existence. The new man, the new society, constantly expanding ideas and horizons, wants to overthrow the natural order. This also happens when conceiving a child. People have strayed from the natural path, which makes it, nowadays, to talk about conceiving a child in the absence of any sexual bond, that is, the use of various medical laboratory techniques designed to help human reproduction. Medical technology and inventions which have an impact on humans, family relations and the existence of people are constantly developing. These inventions and the development of medical knowledge may bring huge advantages to people, but they are also changing and modifying the society in larger ways, and, at the same time, they are full of medical, social, political, legal, religious, ethical and economical questions and also issues which have many connections to human rights (right to life, right to private and family life) and principles (the best interests of the child). The field of biotechnology is constantly evolving and providing us new ways to treat, modify, and cure people, even if differences exist around the world, among other reasons, because of different kinds of legislative decisions, historical events which have affected the legislative decisions, and differently evolving national laws. Legal norm exists in the cultural and social settings, and not in some isolated entity.² At

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¹ *The Gospel of John (16,33).*

² M. Deflem, *Sociology of Law: Visions of a Scholarly Tradition*, Cambridge University Press, 2010, pp. 6, 199, <https://file.hukum.uns.ac.id/data/PDIH%20File/e-book/Mathieu%20Deflem%2C%20Sociology%20of%20Law.%20Visions%20of%20a%20Scholarly.pdf>, last consulted on 20.03.2024.

present, Europe is the only region in the world where most countries have ART/MAR³ regulations, but these remain characterised by large variation regarding available treatments and public funding, being restrictive in many countries, especially in Central and Eastern Europe.⁴ Inns., IVF, ICSI⁵ with donor sperm are now considered standard treatments, while access to donor eggs and pre-implantation genetic testing are limited in a larger number of countries. Regarding access to ART, differentiated by sex, heterosexual couples have access to a wide range of treatments, followed by a single woman and couples formed only by women. Some individuals seeking to become parents and unable to access ART in their country of residence travel abroad to obtain it in another country⁶, a phenomenon known as CBRC, which may also refer to cases in which gametes and embryos are imported or exported across national borders.

Louise Brown was the first so-called „test tube baby”. It happened in England, in 1978, and it marked only the beginning of the last years of continuous and successful use of ART in humans and the availability of an increasingly wider range of specific techniques.⁷ The second successful birth of a „test tube baby” was registered in India⁸ just 67 days after Louise Brown was born. In Romania, a woman held the record as the oldest woman to give birth using IVF and a donor egg, when she gave birth, in 2004, at the age of 66, a record passed in 2006. In 2017, American researchers managed to create an animal foetus, a lamb, in an artificial uterus (a type of bag - biobag - filled with amniotic fluid), successfully implementing the process of ectogenesis (embryonic development outside the maternal body, *in vitro*), keeping this foetus alive, outside the body, for 4 weeks, using advanced medical techniques and specific equipment. This event came shortly after the attempt, in 2016, by a team of Cambridge researchers, to sustain an embryo in an artificial uterus for 13 days.

Beyond the undeniable advantages of such a procedure (of great help: in premature births, for couples who cannot procreate or for same-sex couples who want their own child, in the case of uterine malformations, and even in the case of families with transmissible genetic diseases), shall we talk about a kind of „form without substance”, applied *mutatis mutandis*? Will we be in danger of abandoning the inside and focus only on the outside, absolutizing it, implicitly contesting the role of the internal structure that is represented by motherhood? What will be the implications for the filiation of this pregnancy of the future? What are the present limits, but also the potential ones, legal and religious, beyond which we must stop? Here are just a few questions that we intend to outline an answer in this paper.

³ ART includes all fertility treatments in which either eggs or embryos are handled. The main type of ART is IVF. MAR covers a broad set of interventions to treat infertility, including treatments such as ovulation inducing drugs and assisted insemination, while ART is limited to interventions occurring outside of the patients' body. In practice, however, the two terms are sometimes used interchangeably in non-technical debates. See M. Seiz, T. Eremenko, L. Salazar (European Commission), *Socioeconomic differences in access to and use of Medically Assisted Reproduction (MAR) in a context of increasing childlessness*, Joint Research Centre Working Papers Series on Social Classes in the Digital Age 2023/03, https://joint-research-centre.ec.europa.eu/system/files/2023-01/JRC132097_socioeconomic_differences_in_access_to_and_use_of_medically_assisted_reproduction.pdf, last consulted on 21.03.2024.

⁴ See M. Seiz, T. Eremenko, L. Salazar, *op. cit.*, *loc. cit.*, p. 5 *et seq.*, points 16-21. Norway was the first country to establish ART legislation in 1987. In the most recent years ART legislation has been passed in Cyprus (2015), Poland (2015) and Malta (2018). However, there are still countries in which there is no specific ART legislation, such as Ireland and Romania.

⁵ ICSI is a technique used during IVF, where a single sperm is injected directly into the egg for the purpose of fertilisation. The first successful birth by ICSI took place on 14.01.1992, developed by Gianpiero D. Palermo at the Centre for Reproductive Medicine in Brussels (actually, the discovery was made by a mistake). See https://en.wikipedia.org/wiki/Assisted_reproductive_technology, last consulted on 21.03.2024.

⁶ *Ibidem*. Four broad sets of factors that underlie this phenomenon have been identified: resource constraints, legal and religious prohibitions, quality and safety concerns, and socio-cultural barriers. Surrogacy is available in a limited number of countries in Europe and therefore involves individuals moving outside of the region. This form of CBRC has received the most attention due to the important ethical debates it raises, with many of the surrogate mothers coming from low resource countries and/or groups, and controversies such as the abandonment of children with disabilities.

⁷ 25.07.1978, the first successful birth of a child after IVF. The procedure took place at Dr Kershaw's Cottage Hospital in England. Patrick Steptoe (gynaecologist) and Robert Edwards (physiologist) worked together to develop the IVF technique. Steptoe described a new method of egg extraction and Edwards was carrying out a way to fertilise eggs in the lab. See, for details, G. Sharma, *Assisted reproductive technology: Definition, Benefits*, <https://www.cloudninefertility.com/blog/assisted-reproductive-technology-definition-benefits>, and also https://en.wikipedia.org/wiki/Assisted_reproductive_technology, last consulted on 21.03.2024.

⁸ A girl (Durga) was conceived *in vitro* using a method developed independently by Subhash Mukhopadhyay, a physician and researcher from Hazaribagh, who had been performing experiments on his own with primitive instruments and a household refrigerator. State authorities prevented him from presenting his work at scientific conferences, and it was many years before Mukhopadhyay's contribution was acknowledged in works dealing with the subject.

2. Religion and ART

As it was held in the doctrine⁹, when we talk about human reproduction, the combination of genes is not a game, and the danger of the present world is represented by the tendency to overturn the natural order through genetic selection and, therefore, to create a new man through eugenic genetic engineering. And the biggest concern will have to be the clear identification of the purpose and limits of the intervention of science in the act of human conception. Conception and birth are interesting from multiple perspectives, which intertwine and somehow complement each other, or, in some cases, are generators of the most uncomfortable discussions: psychological, biological and genetic, legal (personality rights and filiation), but also moral and religious. We wonder how much religion or ethics can intervene in various medical procedures or techniques - ART with a third donor, gestation for another or surrogacy? What is the line crossed into the realm of immorality and even illegality when it comes to a medical intervention designed to bring emotional comfort? Can we ignore the fact that, in reality, we are also discussing the disposal of one's own body or self? This is why, we agree¹⁰ that it seems that ART can raise bigger problems, such as the lack of transparency regarding the genetic origin, with the consequence of a high risk of extrinsic kinship of children conceived with the same anonymous biological father or even the fate of the embryos resulting from these medical techniques.

We would be tempted to think that the problems related to infertility and surrogacy would not be as old as the world. Testimonies appeared from ancient times. Researching the Old Testament (Genesis, 16 and 30), we observe such situations, *e.g.*: Abram and Sarai and her maid, Hagar; Jacob and Rachel and her maid, Bilhah; Jacob and Leah and her maid Zilpah. Hagar, Bilhah and Zilpah represent neither more nor less than early forms of surrogate mothers.¹¹ It is interesting to note that, according to the ancient legal norms enshrined in the Code of Hammurabi, an infertile wife could give her maidservant to her husband in order for her to give birth to an heir, who then was to become the adopted son of the lawful wife. If a father calls his sons, born from a slave, „my sons”, then after his death, they were equated with his sons by blood (para. 170 of the Hammurabi Code).

Religion plays a major role in people's attitudes towards ART and various religions have reacted to this treatment in different ways. These range from total acceptance to total rejection of all ARTs, with many shades of grey in between. People will continue debating the issue as long as more advanced ARTs will be. So, let's see how religion respond to ART¹², because many religious communities have strong opinions and religious legislation regarding marriage, sex and reproduction (CRBC, the motivations of gamete donors, posthumous reproduction or gamete retrieval, *inter alia*). Beliefs about the moral status of fertilised eggs (if a human embryo can be regarded as a human being right after fertilisation) are also important and, in countries where this belief is less widespread, there is a greater recourse to these technologies. The same importance also has the beliefs regarding whether individuals have a right to have children, or even whether it is moral to discard healthy embryos or create embryos with abnormalities. Many of the considerations regarding the right to reproduction, the use of third-party gametes, or the status of embryos are shaped by religious norms and beliefs¹³.

Eastern Orthodox Churches¹⁴. The Eastern (Greek) Orthodox Church is not as strict as the Roman (Latin) Catholic Church regarding ART. It allows the medical and surgical treatment of infertility including IUI using the husband's sperm but cannot accept IVF and other ARTs, surrogate motherhood, donor insemination and embryo donation, and suggests adoption as an alternative to those couples unable to accept their sterility problem. If this is not possible, then the Church could accept fertilisation techniques that do not involve surplus embryos, or include any form of donation or embryo destruction. Also, the Church could accept ARTs by using only the parents' gametes and fertilising as many embryos as will be implanted.

⁹ See S. Guțan, *Reproducerea umană asistată medical și filiația*, Hamangiu Publishing House, Bucharest, 2011, p. 2 *et seq.*

¹⁰ See also L. Tec, *Filiația – între adevăr (biologic) și minciună (legală) sau între știință și ficțiune*, 12.03.2014, <https://www.juridice.ro/313293/filiatia-intre-adevar-biologic-si-minciuna-legala-sau-intre-stiinta-si-fictiune.html>, last consulted on 21.03.2024.

¹¹ See, for details, Reader John Nichiporuk, *Did Abraham Live by the Hammurabi Code?*, 18.12.2020, <https://catalog.obitel-minsk.com/blog/2020/12/did-abraham-live-by-the-hammurabi-code>, last consulted on 21.03.2024.

¹² For details, see https://en.wikipedia.org/wiki/Religious_response_to_assisted_reproductive_technology#cite_note-2, last consulted on 12.03.2024.

¹³ See M. Seiz, T. Eremenko, L. Salazar, *op. cit.*, *loc. cit.*, p. 43 *et seq.*

¹⁴ See H.N. Sallam, N.H. Sallam, *Religious aspects of assisted reproduction*, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5096425/>, 2016, and https://en.wikipedia.org/wiki/Religious_response_to_assisted_reproductive_technology, last consulted on 12.03.2024.

Catholicism. The Catholic Church opposes¹⁵ certain ARTs and artificial birth control since they separate the procreative goal of marital sex from the goal of uniting married couples, allowing the use of a small number of ARTs and pregnancy postponement methods like natural family planning. The church allows forms that permit conception to take place from normative sexual intercourse, such as the use of hormonal injections to grow follicles and assist in ovulation, and IUI with sperm collected using the approved method of collection during intercourse. Pope Benedict XVI claimed that IVF separates the unitive procreative actions that characterise the sexual embrace. In addition, the church opposes IVF because it might cause disposal of embryos. Catholics believe an embryo is an individual with a soul who must be treated as such. In addition, when it comes to the embryos, cryo-freezing them for later use is considered immoral. Techniques involving only the married couple (homologous AIns. and fertilisation) are perhaps less reprehensible, yet remain morally unacceptable. They dissociate the sexual act from the procreative act. The act which brings the child into existence is no longer an act by which two persons give themselves to one another, but one that „entrusts the life and identity of the embryo into the power of doctors and biologists and establishes the domination of technology over the origin and destiny of the human person. Such a relationship of domination is in itself contrary to the dignity and equality that must be common to parents and children.”¹⁶ According to the Catholic Church, it is not objectively evil to be infertile, and adoption is seen as an option for those who still wish to have children.

Lutheranism. The Evangelical Lutheran Church in America produced an authoritative document and unanimously concluded that IVF does not *in and of itself* violate the will of God as reflected in the Bible, when the wife's egg and husband's sperm are used. The Lutheran Churches approve of AIns. by a husband, though representatives from the Lutheran Church-Missouri Synod hold that such IVF is only unobjectionable if the sperm and egg come from husband and wife and all of the fertilised eggs are implanted in the wife's uterus. With regard to AIns. by a donor, the Evangelical Lutheran Church in America teaches that it is a „cause for moral concern”¹⁷, while the Lutheran Church-Missouri Synod rejects it.

Hinduism¹⁸ is generally tolerant of ART, but with the expectation that sperm cells and eggs should come from a married couple, or from close relatives in cases of infertility. In fact, the Hindu religion agrees with most of the ARTs, but it demands that the oocyte and the sperm used in the procedure to (better) come from a married couple. However, Hinduism also accepts sperm donation but the donor has to be a close relative of the infertile husband. In addition, abortion is not prohibited and the adoption of a child, which usually comes from a numerous family, is also practised. This liberal attitude has made India an important destination for reproductive tourism and many couples travel to India for ART, including members of the LGBT communities.

Islam¹⁹. The Islamic community largely accepted ART. IVF and similar technologies are permissible as long as they do not involve any form of third donor (of sperm, eggs, embryos, or uteruses - the use of a third party is considered an adultery). AIns. with the husband's semen is allowed, and the resulting child is the legal offspring of the couple. It is allowed the IVF of an egg from the wife with the sperm of her husband and the transfer of the fertilised egg back to the uterus of the wife, only if the procedure is indicated for a medical reason and is carried out by an expert physician. Adoption of a child from an illegitimate form of ART is not allowed (the child who results from a forbidden method belongs to the mother who delivered him/her and he/she is considered to be an illegitimate child). If the marriage contract has come to an end because of divorce or death of the husband, ART cannot be performed on the ex-wife even if the sperm comes from the former husband. An excess number of embryos can be preserved by cryopreservation and the frozen embryos are the property of the couple alone and may be transferred to the same wife in a successive cycle, but only during the duration of the marriage contract (embryo donation is prohibited). SFR is only allowed if the prospect of carrying the pregnancy to viability is very small or if the health or life of the mother is in jeopardy. All forms of surrogacy are forbidden; establishment of sperm banks with „selective” semen threatens the existence of the family and the „race” and should be prevented. The physician is the only qualified person to practise ART in all its permitted varieties and,

¹⁵ See <https://web.archive.org/web/20081229164506/http://www.medicalnewstoday.com/articles/38686.php>, last consulted on 20.03.2024.

¹⁶ See Catechism of the Catholic Church, https://www.vatican.va/archive/ENG0015/___P86.HTM, last consulted on 20.03.2024.

¹⁷ See <https://www.advocatehealth.com/assets/documents/faith/lutheranfinal.pdf>, last consulted on 20.03.2024.

¹⁸ See H.N. Sallam, N.H. Sallam, *Religious aspects of assisted reproduction*, op. cit., loc. cit.

¹⁹ *Ibidem*. See also M.C. Inhorn, *Making muslim babies: IVF and gamete donation in Sunni versus Shi'a Islam*, 2006, *Cult Med Psychiatry*, no. 30, p. 427-450, <https://doi.org/10.1007/s11013-006-9027-x>, last consulted on 20.03.2024.

if he performs any of the forbidden techniques, he is guilty, his earnings are forbidden, and he must be stopped from his morally illicit practice.

Orthodox Judaism²⁰. In Orthodox Judaism, AIns. with the husband's sperm is allowed if the wife cannot become pregnant in any other way. An additional major issue is that of establishing paternity. For a baby conceived naturally, the father is determined by a legal presumption: a woman's sexual relations are assumed to be with her husband. Regarding an IVF child, this assumption does not exist and requires an outside supervisor to positively identify the father (but doctors or laboratory workers present at the time of the fertility treatment are not considered supervisors due to a conflict of interest and their pre-occupation with their work; as such, supervisory services are required for all treatments involving lab manipulation or cryopreservation of sperm, ovum or embryos). According to many Orthodox decision makers, egg donation and surrogacy are allowed pending religious fertility supervision.

Conservative Judaism²¹. AIns. is not typically allowed because it brings up the issue of a variety of Jewish Laws regarding incest, adultery, and lineage. In fact, there are some Rabbis who work closely with fertilisation clinics so that they can supervise all genetic material. The use of anonymous donors is strongly discouraged. Regarding adultery, a man may have made multiple sperm donations, and that would cause problems for half-siblings to potentially meet and marry (and that violates the Jewish incest laws). While some consider adultery if a woman uses sperm from a man that is not her husband, others, however, don't see this as an issue because both members of the couple consent to the use of third-party sperm donation. Surrogacy and egg donation are permissible and the birth mother, rather than the genetic mother, is considered the mother of the child, therefore conversion may be necessary if a non-Jewish woman acts as a gestational surrogate. A maximum of 3 embryos may be implanted at a time. Freezing and donation of embryos is permitted.

Buddhism²². Buddhism is also a very liberal religion regarding ART. It is allowed IVF (without restricting the access to this medical procedure only to the married couples) and also sperm donation. In this tradition, a child conceived from donated genetic material has the right to meet his genetic parents as he reaches maturity.

Japanese culture²³. IUI, IVF, ICSI, and donor insemination is permitted (the first sperm bank in Japan was established in Tokyo in 1965). However, oocyte donation and surrogacy are prohibited by law, and also IVF if both partners have an HIV infection.

Chinese culture²⁴. As in Japanese religions, Chinese religions are family-oriented and the practice of IUI, IVF, ICSI, cryopreservation and Preimplantation Genetic Diagnosis (PGD) are allowed. However, the following procedures are prohibited: sex selection without medical indication, surrogacy, embryo donation, gamete donation and human reproductive cloning.

3. Legal considerations about ART around the world

3.1. Generalities

Spain²⁵ and Israel²⁶ are among the most advanced and active ART industries in the world, having very pro-IVF legislation compared to most other European countries.²⁷ Both countries can be considered as early adopters

²⁰ See https://en.wikipedia.org/wiki/Religious_response_to_assisted_reproductive_technology, *op. cit.*, *loc. cit.*

²¹ See https://en.wikipedia.org/wiki/Religious_response_to_assisted_reproductive_technology, *op. cit. loc. cit.*

²² See H.N. Sallam, N.H. Sallam, *Religious aspects of assisted reproduction*, *op. cit.*, *loc. cit.*

²³ *Ibidem.*

²⁴ *Ibidem.*

²⁵ Spain has a national health service covering all citizens with wide-ranging benefits and high-quality services mostly free of charge, where regional authorities are entirely responsible for healthcare management. The prevalence of single-parent families is particularly high in Spain compared with other European countries. The Spanish ART industry has become the largest European IVF provider. See also Law no. 35/1988 on Assisted Reproduction Techniques, revised by Law no. 10/1995 of the Penal Code and Law no. 45/2003, reformed by Law no. 14/2006 on Assisted Reproduction Techniques and partially revised by Law no. 19/2015 of administrative reform measures in the field of the Administration of Justice and the Civil Registry.

²⁶ In Israel, a combination of historical, religious and other cultural factors, in addition to ongoing military conflict, form a very pro-fertility society where reproduction plays a central role in family structure and individual's life. Strong economic and technological development, full public funding of ART as well as a tendency to want large families yet begin childbearing years at an advanced age (which often necessitates the use of ART) help to explain the expansion of the ART industry in Israel. See also Public Health Regulations (IFV), 1987, revised by National Health Insurance Law, 1994; revised again by Health Ministry guidelines, 2014.

²⁷ The main similarity between Israel and Spain is the increasing use of ART due to age-related infertility. Socio-financial conditions and techno-scientific expectations are leading many women and men to postpone parenthood, which has been described as „structural infertility“. For details, see I. Alon, J. Guimon, R. Urbanos-Garrido, *Regulatory responses to assisted reproductive technology: a comparative*

of ART, although for different reasons. Funding policies, market structures, and some restrictions mainly differ, and each country faces different debates arising from the increased use of ART.

In Europe, there are major differences in ART legislation. A European directive²⁸ fixes standards concerning the use of human tissue and cells, but all ethical and legal questions on ART remain the prerogative of EU member states. In 11 countries all women may benefit; in 8 others, only heterosexual couples are concerned; in 7 only single women; and in 2 (Austria and Germany) only lesbian couples. Spain was the first European country to open ART to all women, in 1977, the year the first sperm bank was opened there²⁹. In France³⁰, the right to ART is accorded to all women. In the last 15 years, legislation has evolved quickly. *E.g.*, Portugal made ART available in 2006 with conditions very similar to those in France, before amending the law in 2016 to allow lesbian couples and single women to benefit. Italy³¹ clarified its uncertain legal situation in 2004 by adopting Europe's strictest laws: ART is only available to heterosexual couples, married or otherwise, and sperm donation is prohibited. Today, 21 countries provide partial public funding for ART treatment³². The seven others, which do not, are Ireland, Cyprus, Estonia, Latvia, Luxembourg, Malta, and Romania. Such subsidies are subject to conditions, however. In Belgium, a fixed payment of €1,073 is made for each full cycle of the IVF process. The woman must be aged under 43 and may not carry out more than six cycles of ART, and there is also a limit on the number of transferable embryos, which varies according to age and the number of cycles completed. Germany tightened its conditions for public funding in 2004, which caused a sharp drop in the number of ART cycles carried out, from more than 102,000 in 2003 to fewer than 57,000 the following year. Since then, the figure has remained stable. Most European countries allow donations of gametes by third parties. But the situations vary depending on whether sperm or eggs are concerned. Sperm donations are authorised in 20 EU member states; in 11 of them anonymity is allowed. Egg donations are possible in 17 states, including 8 under anonymous conditions.³³ On 12 April, the Council of Europe adopted a Recommendation³⁴ which encourages an end to anonymity. 17 countries limit access to ART according to the age of the woman. 10 countries have established an upper age limit, varying from 40 (Finland, Netherlands) to 50 (including Spain, Greece and Estonia). Since 1994, France is one of a number of countries (including Germany, Spain) which use the somewhat vague notion of „natural age of procreation”³⁵.

analysis of Spain and Israel, in *Journal of Assisted Reproduction and Genetics*, vol. 36, 2019, pp. 1665–1681, <https://doi.org/10.1007/s10815-019-01525-7>, last consulted on 22.03.2024.

²⁸ See Directive 2004/23/EC of the European Parliament and of the Council of 31 March 2004 on setting standards of quality and safety for the donation, procurement, testing, processing, preservation, storage and distribution of human tissues and cells, OJ L 102/07.04.2004, pp. 0048-0058, <https://eur-lex.europa.eu/legal-content/en/TXT/HTML/?uri=CELEX:32004L0023>, last consulted on 08.03.2024.

²⁹ See O. Jézéquelou, *How does assisted reproductive technology work in Europe?*, 2019, https://www.europeandatajournalism.eu/cp_data_news/How-does-assisted-reproductive-technology-work-in-Europe/, last consulted on 22.03.2024.

³⁰ France allows ART also for lesbian couples and single women (Law no. 2021-1017 of 2 August 2021 on bioethics). See <https://www.legifrance.gouv.fr/loda/id/JORFTEXT000043884384/>, last consulted on 15.03.2024. Anonymity, gratuity and volunteerism are the main principles on which the donation of gametes and the reception of embryos. The bioethics law provides that from September 1, 2022, all donors consent to access to their non-identifying data and their identity before making a donation. The person resulting from a donation may, upon reaching the age of majority and if they wish, have access to the donor's non-identifying data and/or identity by making a request. As part of the bioethics law, frozen embryos from people who no longer have parental plans and who consent to reception may be offered to couples composed of a man and a woman or to couples of women of childbearing age, but also to a single woman of childbearing age. For recipients, this is an intrauterine embryo transfer after thawing. For people who wish it, it is possible, during IVF, to fertilise all or part of the oocytes collected. Oocytes or extra-embryos are then frozen in view for further use. People are then consulted each year in writing on the future of their frozen embryos (continuation of preservation for later transfer, reception of one's embryos by another couple or single woman, looking for scientific or cessation of their conservation). Consent to embryo donation is collected in writing and can be revoked in a reflection period of 3 months. After this period, consent is confirmed. Furthermore, the cessation of conservation embryos is also planned in very specific conditions. It is, for example, if the people consulted repeatedly do not give an opinion on the fate of their embryos kept for at least five years. See, for details, https://www.agence-biomedecine.fr/IMG/pdf/bd_stc_biomed23-1_guide_amp_pds_170x245_8p.pdf, last consulted on 22.03.2024.

³¹ Access to ART is regulated in Italy by Law no. 40/2004. On December 18, 2023, Italy's Scientific Advisory approved an „Update to the Guidelines Comprising the Indications for Procedures and Techniques Related to Medically Assisted Reproduction”, a document showing how to apply Law no. 40/2004 considering changes made in recent years by the rulings. Despite its title, this document is not a set of clinical guidelines for diagnosing and treating infertility. Italy's body for clinical practice and public health guidelines (the *Sistema Nazionale Linee Guida*) has not accredited any guidelines for the clinical management of infertility. See M.C. Valsecchi, *Guidance on Medically Assisted Reproduction Coming in Italy?*, <https://www.medscape.com/viewarticle/guidance-medically-assisted-reproduction-coming-italy-2024a100014e?form=fpf>, 17.01.2024, last consulted on 20.03.2024.

³² See O. Jézéquelou, *op. cit.*, *loc. cit.*

³³ *Ibidem.*

³⁴ See <https://pace.coe.int/pdf/a1b29a06632a0d2f52ecb035e0209db36a6dd0b567d6055cb1de31bca2033b71/doc.%2014995.pdf>, last consulted on 15.03.2024.

³⁵ See O. Jézéquelou, *op. cit.*, *loc. cit.*

In 2017, the steering council of France's Agency of Biomedicine established an age limit of 43 for women using ART. 10 countries have no age limit for ART. These include Austria, Hungary, Italy and Poland.

Despite different national laws, human rights should secure the very basic rights which would agree everyone should have. ECHR and ECtHR were created to provide effective control mechanism for human rights³⁶ and the development and flexibility of the ECHR interpretation provides a fertile ground to analyse ART in the context of the ECHR. The ECtHR case-law shows that „the right to become a parent”, even „parent genetically”, is legally protected. The right to become a parent can be translated into the right to have children. The right of a couple to conceive a child and to make use of ART for that purpose is protected by art. 8 ECHR³⁷, as such a choice is a form of expression of private and family life (Case *S.H. and others v. Austria*³⁸, para. 82; Case *Knecht v. Romania*³⁹, para. 54). According to the ECtHR, the same applies for preimplantation diagnosis when artificial procreation and termination of pregnancy on medical grounds are allowed (Case *Costa and Pavan v. Italy*⁴⁰). Like the notion of private life, the notion of family life incorporates the right to respect for decisions to become a parent in the genetic sense (Case *Dickson v. the United Kingdom*⁴¹, para. 66; Case *Evans v. the United Kingdom*⁴², para. 72). However, the provisions of art. 8 taken alone do not guarantee either the right to found a family or the right to adopt (Case *E.B. v. France*⁴³, para. 41; Case *Petithory Lanzmann v. France*⁴⁴, para. 18). In addition, however worthy an applicant's personal aspiration to continue the family line, art. 8 does not encompass the right to become a grandparent (Case *Petithory Lanzmann v. France*, para. 20). ECtHR considered that concerns based on moral considerations or on social acceptability must be taken seriously in a sensitive domain like artificial procreation (Case *S.H. and others v. Austria*, para. 100). ECtHR found no violation of art. 8 where domestic law permitted the applicant's former partner to withdraw his consent to the storage and use by her of embryos created jointly by them, preventing her from ever having a child to whom she would be genetically related (Case *Evans v. the United Kingdom*, para. 82). Art. 8 ECHR does not require States to legalise surrogacy. Therefore, the refusal to recognise a legal relationship between a child born through a surrogacy arrangement abroad and the intended parents does not violate the parents' and children's right to family life if this inability to obtain recognition of the legal parent-child relationship does not prevent them from enjoying their family life together. In particular, there is no violation of their right to family life if the family is able to settle in the respective member State shortly after the birth of their children born abroad and if there is nothing to suggest that the family is at risk of being separated by the authorities on account of their situation (Case *Menesson v.*

³⁶ See: I. Cameron, *An Introduction to the European Convention on Human Rights*, Iustus Förlag, 2006, p. 38; R.K.M. Smith, *International Human Rights*, 5th ed., Oxford University Press, 2012, p. 96-97.

³⁷ See *Guide on Article 8 of the Convention – Right to respect for private and family life*, points 127, 317-321, p. 37, 81-82, at https://www.echr.coe.int/documents/d/echr/guide_art_8_eng, last consulted on 22.03.2024.

³⁸ App. no. 57813/00, judgment from 03.11.2011, <https://hudoc.echr.coe.int/eng#%7B%22itemid%22%3A%22001-107325%22%7D>, last consulted on 10.04.2024.

³⁹ App. no. 10048/10, final judgment from 11.02.2013, <https://hudoc.echr.coe.int/eng#%7B%22itemid%22%3A%22001-113291%22%7D>, last consulted on 10.04.2024.

⁴⁰ The case concerned an Italian couple who were healthy carriers of cystic fibrosis and wanted, with the help of medically-assisted procreation and genetic screening, to avoid transmitting the disease to their offspring. In finding a violation of art. 8, ECtHR noted the inconsistency in Italian law that denied the couple access to embryo screening but authorized medically assisted termination of pregnancy if the foetus showed symptoms of the same disease, and concluded that the interference with the applicants' right to respect for their private life and family life had been disproportionate. App. no. 54270/10, final judgment from 11.02.2013, <https://hudoc.echr.coe.int/eng#%7B%22appno%22%3A%2254270/10%22%22%22itemid%22%3A%22001-112993%22%7D>, last consulted on 10.04.2024.

⁴¹ App. no. 44362/04, judgment from 04.12.2007, <https://hudoc.echr.coe.int/eng#%7B%22itemid%22%3A%22001-73360%22%7D>, last consulted on 10.04.2024.

⁴² App. no. 6339/05, judgment from 10.04.2007, <https://hudoc.echr.coe.int/eng#%7B%22fulltext%22%3A%22Evans%22%22%22documentcollectionid%22%3A%22GRANDCHAMBER%22%22%22CHAMBER%22%22%22itemid%22%3A%22001-72684%22%7D>, last consulted on 10.04.2024.

⁴³ App. no. 43546/02, judgment from 22.01.2008, <https://hudoc.echr.coe.int/eng#%7B%22fulltext%22%3A%22Case%20E.B.%20c.%20France%22%22%22documentcollectionid%22%3A%22GRANDCHAMBER%22%22%22CHAMBER%22%22%22itemid%22%3A%22001-84571%22%7D>, last consulted on 10.04.2024.

⁴⁴ App. no. 23038/09, judgment from 12.11.2019, at <https://hudoc.echr.coe.int/eng#%7B%22itemid%22%3A%22001-199287%22%7D>, last consulted on 10.04.2024.

France⁴⁵, 2014, para. 92-94; Case *Labassee v. France*⁴⁶, para. 71-73; Case *Foulon and Bouvet v. France*⁴⁷, para. 58). ECtHR also rejected a complaint concerning the refusal to grant Polish citizenship to two children born by way of a surrogacy arrangement in the United States (the parents were a same-sex couple who lived in Israel and who both held Israeli citizenship, although one also had Polish citizenship) and found that art. 8 was not applicable as the family lived together in Israel, where their family ties were legally recognised (Case *S.-H. v. Poland*⁴⁸).

ECtHR state that a same-sex couple living in a stable relationship falls within the notion of family life, as well as private life, in the same way as a heterosexual couple (Case *Vallianatos and Others v. Greece*, para. 73-74; Case *X and others v. Austria*, para. 95; Case *P.B. and J.S. v. Austria*, para. 30; Case *Schalk and Kopf v. Austria*, para. 92-94)⁴⁹.

ART has been regulated in the UK⁵⁰ for over 25 years. There are three main laws: the „Surrogacy Arrangement Act” (1985), the „Human Embryology & Fertilisation Act” (1990) and the „Human Reproductive Cloning Act” (2001). In 1991, the Human Fertilisation and Embryology Authority (HFEA) was founded. Clinics require a licence from the HFEA in order to operate and all treatment and results must be reported to the HFEA. The laws prohibit cloning, cross-species embryo transfer, gene modification. Sex selection (for non-medical purposes), surrogacy, egg donations, sperm donation and the development of an embryo outside the human body for more than 14 days. The number of embryos that can be transferred in a single cycle is limited to two for women under 40 years old and increases to three for women over 40. Embryo cryopreservation is permissible, but the embryos must be destroyed after ten years. New laws have been passed in the UK removing the anonymity of gamete donors. Once over 18 years old, a child conceived by egg, sperm or embryo donations now has the right to information about their genetic parents. IVF is free in the UK for women who are under forty but not for over forties which has led to UK women over 40 travelling abroad for access to cheaper ART treatments.

USA⁵¹ regulate ART at a federal and state level. In 1992, the „Fertility Clinic Success Rate and Certification Act” was introduced to legislate ART at a federal level. The Centres for Disease Control and Prevention, the Food and Drug Administration and the Centres for Medicare and Medicaid Services are responsible for enforcing the Act. At the individual state level, the regulations vary. Some states have very limited regulations, while others are more comprehensive. Cloning is prohibited in some states; surrogacy is prohibited in others. Thirteen states have no ART regulations. The code of Federal Regulations-21 CFR Part 1271 sets standards for human tissue and tissue-based products but does not cover reproductive tissue. There is, therefore, a wide range of variations in sperm banks, genetic screens and other reproductive tissue treatments across clinics. The „Good Tissue Practice” regulations contain minimal sections relating to reproductive establishments. Additionally, there are professional guidelines and good practice protocols developed by The American Society of Reproductive Medicine and the Society for Assisted Reproductive Technology that some clinics follow. The guidelines include limitations on age and embryo transfer numbers (one for women under 35 and no more than two per cycle).

⁴⁵ App. no. 65192/11, final judgment from 26.09.2014, <https://hudoc.echr.coe.int/fre#%7B%22languageisocode%22:%5B%22ENG%22%5D,%22appno%22:%5B%2265192/11%22%5D,%22documentcollectionid%22:%5B%22CHAMBER%22%5D,%22itemid%22:%5B%22001-145389%22%5D%7D>, last consulted on 10.04.2024.

⁴⁶ App. no. 65941/11, final judgment from 26.09.2014, <https://hudoc.echr.coe.int/fre#%7B%22languageisocode%22:%5B%22FRE%22%5D,%22appno%22:%5B%2265941/11%22%5D,%22documentcollectionid%22:%5B%22CHAMBER%22%5D,%22itemid%22:%5B%22001-145180%22%5D%7D>, last consulted on 10.04.2024.

⁴⁷ App. no. 9063/14 and no. 10410/14, final judgment from 21.10.2016, <https://hudoc.echr.coe.int/fre#%7B%22itemid%22:%5B%22001-164968%22%5D%7D>, last consulted on 10.04.2024.

⁴⁸ App. no. 56846/15 and no. 56849/15, judgment from 26.02.2019, <https://hudoc.echr.coe.int/eng/#%7B%22languageisocode%22:%5B%22ENG%22%5D,%22appno%22:%5B%2256846/15%22,%2256849/15%22%5D,%22documentcollectionid%22:%5B%22COMMUNICATEDCASES%22%5D,%22itemid%22:%5B%22001-192050%22%5D%7D>, last consulted on 10.04.2024.

⁴⁹ For a detailed analysis of the Court’s case-law on this topic, see the *Case-law Guide on the Rights of LGBTI persons*, https://www.echr.coe.int/documents/d/echr/Guide_LGBTI_rights_ENG, last consulted on 22.03.2024.

⁵⁰ See O. McDermott, L. Ronan, M. Butler, *A comparison of assisted human reproduction (AHR) regulation in Ireland with other developed countries*, <https://reproductive-health-journal.biomedcentral.com/articles/10.1186/s12978-022-01359-0>, last consulted on 20.03.2024.

⁵¹ *Ibidem*.

3.2. ART and the International Federation of Fertility Societies (IFFS) Surveillance`s⁵² (2022)

The IFFS „Surveillance 2022” showed that, the ongoing SARS-CoV-2 (COVID-19) pandemic had a profound impact on all aspects of reproductive care:

- no significant overall increase in *the number of ART centres* for most countries; the total increase of 776 ART centres cited was attributed to four countries (China, India, the Russian Federation, and Spain) each recording an increase of more than 100 centres;
- some form of *ART regulation*, usually conveyed by federal or national laws or statutes, existed in 69% of the responding countries; however, fewer countries have maintained legislation or professional organisational guidelines for determining the appropriate number of embryos to transfer per cycle and imposed penalties for failure to comply with such guidance; of the 27% of countries (24) that did report regulatory changes since 2018, new legislation was primarily directed at providing increased access to donated gametes and embryos together with more limited access to surrogacy and CBRC services;
- although no specific trends were identified that directly limited *access to infertility services* by single women and men, male and female same-sex couples, and transgender or intersex individuals, for the first time, most countries (54%) required a couple to be in a recognized and/or stable relationship to gain access to ART services; likewise, treatments provided to single women remain more widely accepted and allowed than treatments provided to single men;
- currently, no countries are posing global statutory obstacles to ART; thus, access continues to expand in many countries, and almost all aspects of ART are widely available in nearly all countries surveyed;
- little change was reported since 2018 with respect to *the statutory or other forms of oversight that facilitate the protection of the welfare of the future child* based on assessments of individuals seeking infertility treatment; few countries formally address and monitor the mental and physical health or the socio-cultural environment of prospective parents and their offspring⁵³;
- *ICSI* is offered universally;
- other micro manipulation procedures (*e.g., PGT-M*⁵⁴) are considered as essential technologies and are available in all comprehensive ART centres;
- *cryopreservation of gametes and embryos* is also regarded as an essential service,
- no significant changes in the *number of countries that allowed or permitted cryopreservation of sperm, oocytes, and/or pre-implantation embryos for fertility treatments for medical and non-medical indications* were found over the three years since the 2018 study;
- *the utilisation of donated sperm and/or oocytes with donor compensation* appears to be expanding; the use of these materials relies on MAR/ART treatments that are subject to regulations in nearly 50% of countries that responded to the survey (these activities are usually controlled by federal regulations, but others report regional and local laws and a role for guidelines from professional organisations);
- more countries have reported *the existence of guidelines or laws pertaining to cryopreservation of sperm, oocytes, and preimplantation embryos* for fertility treatments or medical indications compared to information collected in 2019;
- *embryo donation* is also in more frequent use (these embryos are often donated from a previous IVF cycle, but they can also be generated *de novo* from donated gametes; this latter option is not permitted in many countries); donor anonymity that has historically been offered and maintained for gamete donation is currently being reassessed - approximately 20 countries reported changes in relevant guidelines that expanded the amount of information provided to donors and offspring;

⁵² A survey initiated in 1998 by Dr. Howard Jones, Jr. and Dr. Jean Cohen, assessing practices of ART at the global level, IFFS invites representatives from the global ART community to forward the details of reproductive policy and practice in their home country *via* an electronic platform, responses analysed by an appointed Surveillance Committee and published in Global Reproductive Health. For details, see IFFS „Surveillance 2022”, <https://www.iff reproduction.org/wp-content/uploads/2022/10/IFFS-Surveillance-2022-Published.pdf>, last consulted on 24.03.2024.

⁵³ In countries that do have child welfare provisions in place (federal or local regulation and so on), such as: Greece, Australia, Colombia, France, Paraguay, United Kingdom, Sweden, clinics often have the option to deny treatment when there is evidence or suspicion of domestic violence, drugs and/or alcohol abuse, or serious mental health or disabilities that might impair appropriate childcare.

⁵⁴ Pre-implantation genetic testing for monogenic disorders (PGT-M) / Pre-implantation genetic testing for chromosomal structural rearrangements (PGT-SR) / Preimplantation genetic testing for aneuploidy (PGT-A). Pre-implantation genetic testing can be used by people who have a serious inherited disease in their family to avoid passing it onto their children. PGT-A provides information about the embryo's chromosomes whereas PGT-M looks for the presence of a specific, disease-causing gene.

- ongoing experiences with *cytoplasmic transfer, mitochondrial transfer, and CRISPR-Cas9 technology*⁵⁵ continue to be encouraging; however, these applications remain investigative at this time, with benefits, risks, and limitations that have yet to be determined; some countries have adopted a more cautious approach to mitochondrial transfer and CRISPR-Cas9 over the past three years;
- other topics still regarded as controversial include *human pre implantation embryo research, SFR and sex selection, surrogacy, CBRC, and posthumous reproduction*: the most recent questionnaire revealed a modest increase in research activity focused on *human pre-implantation embryos*, using donated unused embryos, most often with specific restrictions in place; there is also a small but expanding number of countries that are actively pursuing *embryonic stem cell research* (existing oversight in the countries that have established guidelines for this practice is typically based on the Common Rule); *SFR* is allowed in 61% of responding countries - *SFR* is unconditionally allowed in 33% of the responding countries, while 28% permit it with conditions; with the increased availability of *PGT-A*, which is currently permitted in 23 countries, access to sex selection methodologies is expanding; *SFR for sex selection* is permitted in very few countries; patients continued to seek *CBRC services* primarily for lower cost, perceived higher quality, and greater access (fewer respondents reported patients using *CBRC services* for sperm, egg, or embryo donation, and even fewer for any type of surrogacy; *CBRC services* were usually sought for specific therapies that were unavailable in their home countries; more respondents felt that the proportion of patients that travelled elsewhere for oocyte, sperm, and embryo donation was greater than the fraction of those coming into their countries seeking these services, a change perhaps created by the COVID-19 pandemic shut-downs⁵⁶); *posthumous reproduction* remains a contentious topic and not much progress has been made toward resolving some of the ongoing ethical and legal issues;
 - *human reproductive cloning* is almost universally prohibited;
 - *surrogacy* continues to provoke intense international debate regarding legitimate indications for its use, concerns regarding the potential for exploitation, and how to go about handling requested anonymity; these issues intensified in 2020 and 2021 when the COVID-19 pandemic prevented some intended parents from travelling to their surrogates' domicile once their babies had been born; where allowed, surrogacy is usually regulated by a variety of federal and state laws or statutes with other mechanisms in place to ensure legislative enforcement; gestational surrogacy is more often permitted and practised than traditional surrogacy;
 - *in Romania*, the survey stated that Romanian people travel from Romania in order to seek ART (due to the unavailable ART services) for lower cost or higher quality ART in another country.

3.3. The children's filiation in ART

The legal issues raised by ART bring to light, *inter alia*, questions about the human species, the future of humanity or the respect and dignity of the human being. Thus, for the most part, these issues raise questions of (non-)existence of regulations or of any legal protection or of the application of relevant principles in the field, regarding the right to have children or to have access to ART and a priority application of the principle of the best interests of the child, a principle to be linked to a number of child's rights (to have a clear filiation; to preserve his identity, including citizenship, name and family relations; its priority interest to be raised by its natural parents, to be maintained in its family of origin and to know its biological origins, as a component of the right to identity and personal development; to know the aspects/circumstances related to its birth).

Spain⁵⁷. According to art. 7.1. from Law no. 14/2006 (assisted reproduction law), regarding to filiation: „The filiation of those born with assisted reproduction techniques will be regulated by civil laws, except for the specifications established in the following (...)” (legal determination of filiation, posthumous reproduction and surrogate motherhood). In the *heterosexual couples*, depending on the familiar situation of the woman, the filiation rules are different. In the case of a married heterosexual couple, there is a presumption of filiation that the children the wife has during the marriage are from her husband (art. 116 Civil Code). Because of that, the

⁵⁵ Clustered regularly interspaced palindromic repeats (CRISPR/Cas9) is a gene-editing technology causing a major upheaval in biomedical research. It makes it possible to correct errors in the genome and turn on or off genes in cells and organisms quickly, cheaply and with relative ease.

⁵⁶ More than half of the respondents noted the absence of regulations addressing patients coming to (59% – in countries like: Australia, Austria, Brazil, Canada, France, Germany, Italy, Romania, Russia, Sweden, Turkey) or leaving (67% – in countries like: Australia, Austria, Argentina, Canada, China, Germany, Romania, Russia, Sweden) their country in search of *CBRC services*.

⁵⁷ See G. Muñoz Rodrigo, *Filiation derived from assisted reproduction*, 2020, https://eventi.nservizi.it/upload/278/altro/slides_munoz%20rodrigo_rev2.pdf, last consulted on 21.03.2024.

consent of the husband is needed when his wife starts the treatment. Once they have agreed, it is impossible to refuse the filiation (art. 8.1. from Law no. 14/2006). When it comes to non-married heterosexual couples, there is not a presumption, but her partner will be able to become the father of the child if he agrees in a document before the treatment (art. 8.2. from Law no. 14/2006). In the case of *same sex couples of women*, the question is how to determine the filiation of the non-pregnant woman, due to the fact that the pregnant woman always will be a mother (*mater semper certa est*). So, there is a special rule in art. 7.3. from Law no. 14/2006, which allows, as long as they were a married couple, to „declare (...) that she consents that the filiation be determined in her favour with respect to the child born of her spouse”. The non-requiring a proof about the ART treatment might be⁵⁸ a huge mistake because it easily allows to avoid the law principles, so lesbian women can buy reproductive material online and do homemade inseminations. In case of *non-married women*, the law does not include that possibility. *Surrogate motherhood* is an illegal practice, but at the same time it is not punished or expressly prohibited. According to art. 10 from Law no. 14/2006: „The contract by which the pregnancy is agreed, with or without price, by a woman who renounces her maternal filiation in favour of the contractor or a third party will be null and void” (so, the substitute woman will be the mother). However, some people try to avoid the law by going to other countries in which it is legal (like Russia, Georgia and Ukraine). But, if the father is biological, he will be able to recognize the filiation in Spain, and after that, his wife can adopt the child.⁵⁹

France. *Principle of filiation unmodified:* the possibility of having access to origins for people who have received a donation does not modify the rules of filiation; so, the anonymity of the donor is promoted and no filiation can be established between the donor and the children and no liability action can be exercised against the donor. *A secure filiation:* securing the filiation in case of ARTs with third donors (donation of gametes or embryos) by signing a consent mandatory and prior to the donation, by the receivers (notarial deed). *For couples of women:* when obtaining consent by the notary, the couple of women recognizes jointly with the child. This recognition early surrender to the register at the birth of the child and is indicated in the birth certificate.

Italy. Children born following an ART, being blood relatives of their parents, are subject to the rules of common law for establishing filiation, and the action to deny paternity is prohibited in this case.

Germany. Consent of ART is required, as this has the direct effect of establishing filiation to the child. Embryos are considered human persons from the moment of conception; they can only be created for the purpose of being used for reproduction. The identity of the donor is not protected, due to the constitutional enshrinement of the right to know his origin. The filiation is established towards the intended parents (who have expressed their consent). There is the possibility of establishing filiation towards the donor, as biological parent, as he is not protected by the law, but the parental obligations remain linked to the man who expressed his consent for the conception of the child.

Romania. For the first time in our legislation, the Civil Code provides a series of norms regarding ART (art. 441-447 CC), expressly stipulating in art. 447 that (*only*) the legal regime of medically assisted human reproduction with a third donor (and no other ARTs!) is established⁶⁰. According to art. 443 CC, „no one may contest the filiation of the child on grounds related to medically assisted reproduction, nor may the child born thus contest his filiation. The mother's husband may deny the paternity of the child, under the law, if he has not consented to medically assisted reproduction with the help of a third donor, the legal provisions on action in denial of paternity being applicable”. This provision reinforces the thesis that the status of being parent is acquired on the basis of the legal will, and this, and not the biological link, is the foundation of filiation. The third donor does not establish any filiation with the child. Thus, the „intended parents” become the legal parents of the child conceived through ART, the biological filiation of the third donor being definitively replaced by legal fiction by filiation towards the intended parents. Any filiation between the child and the donor being excluded, that ensures the confidentiality of information on donors. With regard to the mother filiation's contesting, the provisions of art. 411 CC are based exclusively on the absolute presumption - *iuris et de iure*, according to which the fact of birth it is crucial for establishing filiation to the mother, and the filiation to a woman (other than the one who gave birth to the child) can only be done by way of adoption. So, we have to deal with the fact that the

⁵⁸ *Ibidem*. Two women made a deal with one friend and he donated his sperm, but, in the end, he regretted it and filed a lawsuit claiming his parenthood. The Court declared the contract null and determined the filiation in his favour (decision from 27.11.2017).

⁵⁹ *Ibidem*.

⁶⁰ See also L. Barac, *Câteva considerații privind implicațiile juridice ale tehnicilor de reproducere umană asistată medical (RUAM)*, <https://www.juridice.ro/311847/cateva-consideratii-privind-implicatiile-juridice-ale-tehnicilor-de-reproducere-umana-asistata-medical-ruam.html>, last consulted on 09.03.2024.

Romanian law is silent on ways of human reproduction with a third donor and the special law promised has not yet appeared. Therefore, we don't know what techniques will be allowed by law⁶¹. Art. 142 letter u) of Law no. 95/2006⁶² stipulates that the regulations regarding transplantation are applicable, including IVF. But IVF is insufficient for the birth of a child because we still need a uterus in which the embryo has to be implanted: the uterus of the woman who had the genetic contribution to *in vitro* conception (in this case, the genetic/biological mother is also the carrier mother) or the uterus of another woman, with no any genetic contribution (in this case, only a psychological mother or carrier mother). Anyway, if our reasoning is that the law allows only IVF, not supported by an embryo transfer, then art. 441-447 CC is absolutely useless.

We can conclude that the law allows what science has been doing in Romania for a long time- insemination from third donors, IVF from third donors and embryo transfer -, but it does not regulate medical contracts, the convention of gestation for another, of maternity of substitution, nor the legal effects in matters of filiation in all these cases. That is why we agree, with other opinions⁶³, that this non-regulation may cause at least the following problems regarding: filiation and the execution of contracts; access to the biological or genetic origins of children resulting from ART; lack of control over reproductive service providers, thus preventing gametes from being trafficked, embryos and „uterus”. And, in the absence of a regulation, and a *de lege ferenda* issue, we have to deal with many questions: what kind of contracts are concluded in the fertilisation clinics authorised in Romania? / what kind of insurance contracts conclude fertilisation clinics that provide storage and cryopreservation of unused extra-embryos? / if such contracts are concluded, are they licit (taking into consideration the absence of a regulation expressly prohibiting or expressly allowing them)? / these contracts cannot be negotiated; therefore they are some kind of adhesion contracts? / what the clinics in Romania do with the extra frozen human embryos abandoned by those who appeal to ART („intended parents/parent”)? / how to manage disputes over gametes and embryos in case of divorce or death of one or both parent/s? At the same time and also a *de lege ferenda* issue, the classification of frozen human embryos in the category of goods or of persons causes serious problems regarding the civil and/or the criminal liability, such as: in the event of intentional destruction of containers in which human embryos are cryopreserved within a fertilisation clinic, we will talk about criminal liability for destruction of goods or about murder? / if the cryopreserved embryos in a clinic will be damaged, due to non-compliance with the conditions required for preservation, the clinic will respond civilly to the intended parents for simple non-performance of the contract or will be criminally liable for murder? / in cases of embryo trafficking, how will be solved the problems regarding parent-child filiation?

4. Conclusions. Pros and cons about ART

Pros about ART:

- from a psychological point of view, in so many cases, IVF mothers show *greater emotional involvement* with their child, and they enjoy motherhood more than mothers by natural conception; similarly, studies⁶⁴ have indicated that IVF fathers express more warmth and emotional involvement than fathers by adoption and natural conception and enjoy fatherhood more (some IVF parents become overly involved with their children);
- *anyone can make use of* - it allows a wider spectrum of people to become parents and share in the pregnancy and childbirth process (this includes same-sex couples, women who are physically unable to carry a baby to term, and single women);
- *a control over the timing* - e.g., IVF help patients who are focused on their job or who have a unique life scenario that influences when they want their baby to be born, by allowing them greater overall control (embryos or eggs that have been cryopreserved can be utilised in the future); when previous infertility treatments have failed, IVF can help;
- *giving birth to a healthy child and reducing the risks of having a miscarriage* - genetic testing/screening

⁶¹ See A.R. Motica, L.M. Tec, *Familia prin contract (II)*, 19.03.2023, <https://buletinulnotarilor.ro/familia-prin-contract-parte-a-ii-a-continuar-din-numarul-trecut/>, last consulted on 22.03.2024.

⁶² Published in the Official Gazette of Romania, Part I, no. 372/28.04.2006, republished in the Official Gazette of Romania, Part I, no. 652/28.08.2015.

⁶³ See L. Barac, *op. cit.*, *loc. cit.*

⁶⁴ See: https://www.researchgate.net/publication/259418507_IVF-Conceiving_Fathers'_Experiences_of_Early_Parenthood; https://www.researchgate.net/publication/227835814_The_Mother-Child_Relationship_Following_In_Vitro_Fertilisation_IVF_Infant_Attachment_Responsivity_and_Maternal_Sensitivity, last consulted on 24.02.2024.

(also known as preimplantation genetic testing - PGT - these have been related to life-threatening diseases such as Down syndrome, sickle cell anaemia) is an important tool for ensuring that.

- *Cons about ART:*
- *risks targeting mother and child*, such as: multiple or ectopic pregnancies; high mortality of the embryo or foetus; premature births; risk of transmission of diseases (unknown at the time of procedures - hepatitis B, HIV); or damage to blood vessels; increased risk of ovarian cysts; the negative effect of multiple pregnancies that can also manifest itself in the health of children who may be born dystrophic or with malformations;
- *ethical and legal issues that accompany ART*, generated also by:
 - the possibility of using embryos thus created for research, experiments, with the possibility of cloning human beings;
 - the possibility of using non-human genetic material in procedures; boycott of natural selection, because in these techniques the natural selection of the strongest male gamete no longer takes place, but a random one, made by the doctor;
 - the possibility of fertilising a female egg with another female egg, in the case of lesbian couples, (without male intervention, a process possible and proven by IVF - experimentally performed on mice since 1977);
 - children born with emotional problems, autism, sensory impairments, low immunity, genetic diseases;
 - some couples must travel to other states to find the best help; all of these stressors can take a serious financial, physical, and emotional issues on couples;
 - the child's right to find out how he was born is violated; depriving the child of a normal family environment, the number of single women who conceived through IVF is increasing;
 - the possibility of extending/practising posthumous reproduction (appearance of the child after one of the donor parents is deceased, using its cryopreserved gametes);
 - separation of sexuality from procreation;
 - affecting the status of the embryo (human being) and its rights, because through ARTs a large reserve of frozen embryos is produced, not all of them being transferred to a woman's uterus; problems related to embryo trafficking;
 - allows the „medicine of desire” - we can choose the sex of the child, skin colour, eye colour;
 - dissociating genetic filiation (motherhood and fatherhood) from social motherhood, with the upheaval of the notion of mother, because surrogacy differs from genetic mother and even legal mother;
 - overturning genealogies, as the surrogate mother can be the sister or mother of the genetic mother;
 - creation of identical twins or same-sex children;
 - affecting the child's personality in the case of ART with surrogate mother, being medically demonstrated the connection that arises during pregnancy between the carrier mother and the child, a relationship brutally broken by handing over the child after birth, based on gestation conventions;
 - aspects related to the human species, its quality, respect and dignity of the human being (human rights), the future of humanity; protection of human rights by means of domestic law, imprinting also on the relationship between domestic law and international human rights law;
 - in some cases, laboratory mix-ups (misidentified gametes, transfer of wrong embryos) have occurred, leading to legal actions against the IVF provider and complex paternity suits;
 - ectogenesis - in Japan research in the field of is quite advanced; this allows the creation of a synthetic, artificial uterus in which the baby can fully develop, rendering the maternal uterus useless;
 - in other countries, AIns. is allowed for lesbians, even gay groups, and not only by insemination of embryos fertilised with their own gametes in the uterus of the surrogate mother, but research is even being carried out to be able to carry the pregnancy themselves, technically possible, because a male pregnancy would be no different from an ectopic pregnancy (such research is being done lately in Australian and American laboratories, so that the father can become the mother of his own child, and the woman can also be the mother and father of her own child by fertilising an egg with another egg);
 - religious issues, some religions assimilating such techniques of ART to adultery.

Most of these issues remain unsolved as no worldwide consensus exists in science, religion, and philosophy on when a human embryo should be recognized as a person. For those who believe that this is at the moment

of conception, IVF for instance becomes a moral question when multiple eggs are fertilised, begin development, and only a few are chosen for uterus transfer. As a result, what about these extra embryos? What should we do with them: keep them frozen, donate them to other infertile couples, thaw them, or donate them to medical research?

That is why a few „unsettling silences” are claiming their right to speak: we need a unitary regulation and clear terms (e.g.: age, presence/absence of a pathology) on ART access and concrete ways of its application; the same medically permitted and prohibited ARTs must be specified and also the effects on filiation and inheritance. *Remember to solve*: the fate of the embryos conceived, but not yet used, if the death of one or both of the intended parent/s occurs, divorce or separation in fact, and the time limit within options may be exercised (e.g.: use only by a spouse, or, only with the consent of the spouses, *post-mortem* use, donation to another couple, revocation of consent); the fate of the embryos in the event of their total abandonment in the clinic, or the surplus of embryos left after use by the intended parent/s and the liability for abandonment; the liability of the clinic in case of destruction/disappearance of cryopreserved embryos or in case of medical errors at implantation; the lack of transparency regarding the genetic origin, with the consequence of a high risk of extrinsic kinship of children conceived with the same anonymous biological father. *Remember to avoid*: embryos traffic - settle a limit on the number of embryos that can be conceived, and maybe stipulating the obligation to use all the embryos conceived, otherwise criminal or civil liability may arise; the violation of human rights (the right to have children, even with malformations), of the principles guiding the rights of the person and of the children (best interests of the child). *The right to privacy and family life should not remain just a story to be told at night when we put our children to sleep. And, sometimes, maybe it's better for us just to remain humans... not God(s)!*

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