Chapter 4

Croatia: Struggling for the Best Interests of the Child and Assisted Reproduction Technologies

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Abstract

The article deals with the legal regulation of medically assisted reproduction (MAR) and the origin of the child conceived by MAR in Croatia.

The first legal provisions regulating medical aspects date back to 1978, and the first legal act dedicated entirely to MAR was enacted in 2009 and amended in 2012 bringing a more liberal approach, concentrating on the best interests of the child as one of the underlining principles of the legal regulation. Among others, legislation protects the right to health, the right of a donor-conceived child or person to know his/her origins, the right to privacy, and the right to be cared for by both parents. The embryo enjoys some kind of protection (ban on experiments, creation chimeras, restriction of creating too many embryos, creation of embryos solely for donation…), but not entirely.

Intended parents, as patients, also enjoy the protection of their rights, but with some restrictions owing to the possibility of being beneficiaries of Assisted Reproductive Technology (ART), such as personal status, age, capability to exercise parental responsibility, etc.

In practice, even though heterologous assisted reproduction technologies are permitted, no donor programmes exist, so couples seek medical help abroad, supported financially by the State Health Insurance.

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1. Introduction

The history of assisted reproduction in Croatia is rich and effective. The success story began at the Clinic for Women's Diseases and Childbirth in Petrova at Peter's Hospital in Zagreb, in 1953, where the anti-sterility programme was introduced. According to the observation of respected Croatian medical doctor, Professor Velimir Šimunić, initially the chances for anti-sterility procedures were very modest, and they dominantly dealt with the consequences of inflammation. Subsequently, the global progress in gynaecological endocrinology and reproductive medicine brought an immense change in making *in vitro* fertilisation (IVF) possible.[1] Edwards and Steptoe gained an international fame developing the technique leading to the birth of the first test tube baby in 1978. The birth of the famous first *in vitro* conceived child Louisa Brown, was followed by *in vitro* conceived births in Australia in 1980, in the USA in 1981, in Germany, Austria and France in 1982, and in 1Belgium, Canada and Croatia in 1983. Thanks to the avid efforts of Croatian embryologists and gynaecologists, Robert, the first *in vitro* conceived child in Croatia was born in 1983, causing sensational success.[2]

Legislation in Croatia followed medical science with a delay, so in 1978 the first provisions on medically assisted reproduction were introduced in a more general act that regulated issues related to reproduction.[3] Three decades later medically assisted

1 Obstacles for successful modern infertility healing were numerous, as 'without material help, expensive equipment, and with numerous obscurities and unknowns in the process, there was scepticism about the final success. At that time, each laboratory created a recipe for the embryo feeder, and the details of the procedure were kept secret. The success rate of treatment was only 5–7% and there were few centers with proven success. Knowledge was reluctantly transferred, education was often expensive and waiting lists for training in the area were long'. Šimunić, 2023, p. 379.

2 Ibid., p. 381.

3 Act on Medical Measures for Exercising the Right to the Free Decision on Giving Birth to Children (*Zakon o zdravstvenim mjerama za ostvarivanje prava na slobodno odlučivanje o rađanju djece*) Official Gazette, No. 18/78.

reproduction (hence after MAR)[4] was regulated by an act dedicated solely to the regulation of MAR,[5] and was replaced by a new act in 2012 that modernised assisted reproductive technologies and enabled extra-marital couples to seek medical help.[6]

MAR procedures are not without controversies, due to the diverse interests of the participants. Intended parents desire to establish a family, children have their rights as human beings and the rights they enjoy as children, third parties (donors and surrogate mothers) have their specific interests (mostly to remain anonymous and receive some reimbursement for their services), and medical clinics that perform MAR to achieve the highest possible success and to get paid for their services.

Public interest in how MAR is regulated is also significant, as specific technologies have to be accepted in order to be regulated or silently sanctioned in national legislation, as some MAR technologies are ethically controversial (such as surrogacy, donor issues, *post-mortem* insemination, choice of beneficiaries, genetic embryo screening, etc.).

The ultimate objective of MAR technologies is the birth of a healthy child. Several individuals and couples seek medical help for various reasons, so when the state denies intended parents access to MAR, their human rights might be infringed and be considered by constitutional and international courts.[7] The court's task is, among others, to balance the different rights at stake.

Legal regulation of assisted reproduction technologies is closely linked to social values, which makes policies and legislative choices even more difficult, as we live

4 Medically assisted reproduction is 'reproduction brought about through various interventions, procedures, surgeries and technologies to treat the various forms of fertility impairment and infertility. These include ovulation induction, ovarian stimulation, ovulation triggering, all ART procedures, uterine transplantation and intra-uterine, intracervical and intravaginal insemination with the semen of husband/partner or donor'. Assisted reproduction technology (ART) are 'all interventions that include the *in vitro* handling of both human oocytes and sperm or of embryos for the purpose of reproduction. This includes, but is not limited to, IVF and embryo transfer ET, intracytoplasmic sperm injection ICSI, embryo biopsy, preimplantation genetic testing PGT, assisted hatching, gamete intrafallopian transfer GIFT, zygote intrafallopian transfer, gamete and embryo cryopreservation, semen, oocyte and embryo donation, and gestational carrier cycles. Thus, ART does not, and ART-only registries do not, include assisted insemination using sperm from either a woman's partner or a sperm donor. (See broader term, medically assisted reproduction, MAR)'. Zegers-Hochschild et al., 2017, p. 1796.

5 Act on Medical Assisted Procreation (Zakon o medicinski potpomognutoj oplodnji), Official Gazette No. 88/2009. This act was drafted for a period of more than ten years, as it included the regulation on in vitro fertilisation.

6 Medically Assisted Reproduction Act, Official Gazette No. 86/2012. (cited as the MAR Act).

7 The European Court for Human Rights considers that some aspects of MAR falls within scope of Art. 8. The right to (assisted) procreation is not an absolute right, as the European Court refers to the moral and ethical sensitivity of the subject of assisted procreation and the little consensus between the Contracting States. It acknowledges a wide margin of appreciation to the Contracting States to shape their laws, balancing the interests at stake. Spaander, 2022, p. 469.

in a pluralistic, postmodern society: not all values are shared by every member of society. Certain things acceptable for some individuals is a moral hell for others. Legislators need to find common core values and design appropriate legal solutions. This demand is hard to achieve, and the situation makes the demand for considering the best interests of the child principle even more complicated.

The best interests of the child can be interpreted in several ways, depending on the system of values of the construing person, using legal argumentation. Although it is almost impossible to find the final answer, particularly in bioethics[8] (which also includes MAR), it is necessary for developing the appropriate legal regulation that is applicable to a particular society.

This article will reassess the national legal regulation of medically assisted reproduction, the social environment and the best interests of the child conceived through MAR.

2. Social Environment and MAR in Croatia

Croatia is a traditional, Mediterranean country.[9] Family plays a vital role in the private lives of individuals.[10] The influence of the Catholic Church is still quite strong in both politics and society.[11] Theologians strongly oppose medically assisted reproduction, considering it as a departure from the natural way of the procreation of the child (as a form of a natural union of spouses),[12] but the interests of infertile couples to receive medical help still predominate in public attitudes.

There is no surprise that legislation from the late seventies was restrained and concentrated on 'artificial insemination'. The Act on Medical Measures for Exercising

8 'Bioethics, a branch of applied ethics that studies the philosophical, social, and legal issues arising in medicine and life sciences. It is chiefly focused on human life and well-being, although occasionally it also treats deals with ethical issues relating to the nonhuman biological environment'. Chadwick, 2024.

9 Korać Graovac, 2021.

10 In the project titled 'European Study Values' in 2017, 98.47% of individuals surveyed found the family to be important or very important in their personal life. In the same project, 75.5% of the surveyed persons in Croatia stated that to grow up happily required that the child have a mother and a father. Aračić, Baloban and Nikodem, 2019, p. 336; 337. The original study was carried out in 4 waves in a certain number of European countries.

11 Bremer, 2010.

12 'Additionally, these interventions could make possible, for example, for a child to be born without the father's knowledge, or after both parents are deceased, by a surrogate mother who can at the same time be the child's genetic sister or grandmother'. 'Along with the encyclical Evangelium Vitae, we remind you that human life starts at the moment of conception and as such, it needs to be protected instead of being created in a way unfitting to its dignity, used for objectionable purposes, and later destroyed as excess material'. Statement by the Justice and Peace Commission of the Croatian Bishops, in For the Sake of Justice and Peace, 2009, pp. 325–326.

the Right to Free Decision on Giving Birth to Children[13] regulated just the medical aspects of assisted reproduction by five articles.[14] As at the time only artificial insemination was known, artificial insemination by husband (AIH) and artificial insemination by donor (AID) were regulated. Only a married couple could request medically assisted reproduction, if the intended parents were not able to have children otherwise. This restrained regulation was not able to follow the progress in medical science, so it needed to be replaced by the act dedicated solely to assisted reproduction.

Although the legislation was not comprehensive, medical institutions in that time applied AIH, AID and *in vitro* fertilisation with the gametes of the couple, gamete intrafallopian transfer (GIFT) with the gametes of a couple, the storage of semen and of embryos (according to a questionnaire from 1994). Medical institutions strived to replace the existing legal regulation by introducing their own rules; some of them were formulated by hospitals' ethic committees. This situation provoked the need for more legal certainty for patients.[15]

National legal literature at the beginning of the nineties (after the birth of the first child conceived *in vitro*), pointed out that the first medical infertility procedures raised numerous ethical and moral doubts, and the general public reactions ranged from sharp disapproval to uncritical acceptance and enthusiasm.[16]

A couple of years later, in the beginning of the twenty-first century, it was evident that there was an increasing interest in the legal regulation, meaning that intended parents wanted to have as many medical procedures as possible to assist them in becoming parents. Additionally, there was a pressing need to secure the protection of the welfare of children conceived with medical help (in respect of their origin and emotional stability), and to prevent the possible abuse of medical proceedings (including the trade of gametes or already-born children).[17]

In 2009 the first comprehensive legislation was introduced – the Act on Medically Assisted Procreation.[18] Some gynaecologists strongly opposed the new legislation, advocating for a much more liberal approach, characterising the period following

13 Act on the Medical Measures for Exercising the Right to Free Decision on Giving Birth to Children, Official Gazette Nos. 18/78, 31/86, 47/89, 88/09). That act regulated some important aspects of human reproduction: voluntary abortion, sterilisation and artificial insemination. It is still in force, except for human reproduction. The name of this act reflected the right according to which each and every person had the right to free decision about giving birth to children. That right was laid down in Art. 272 of the Constitution of the former Socialist Republic of Croatia of 1974 (Constitution of the Socialist Republic of Croatia, Official Gazette 8/1974).

14 Arts. 29–34.

15 In the year 1993/1994 318 children were born through medically assisted procreation: 98 children by artificial insemination by the husband, 26 children by artificial insemination by the donor, 190 children through in vitro fertilisation with the couples' gametes and 4 children by gamete intrafallopian transfer. Korać, 1999, p. 231.

16 Alinčić, 1994, p. 203.

17 Hrabar, 2001, pp. 219–220.

18 Act on Medically Assisted Procreation, Official Gazette Nos. 88/09, 137/09, 124/11, 125/11, 86/12.

the introduction of this act as 'dark age of ART',[19] but the Act on Medically Assisted Procreation (2009) was nevertheless drafted and initiated by medical professionals as well.

Public opinion was divided, especially regarding the creation of potentially surplus embryos.[20]

On the occasion of a bitter public debate on the draft proposal of the Act on Medically Assisted Reproduction (2012), Children's Ombudswoman reacted, calling for tolerance in the debate: 'Inappropriate statements were expressed during the public debate on the proposal of the Act on Medically Assisted Reproduction, so Ombudswoman for Children Mila Jelavić reacted: All children are equal, regardless of the way they had been conceived and came into the world'.[21]

A decade later, during the European Study Values research in 2017, when asked about the extent they approved of 'artificial insemination', 42.2% answered 'always' and 27,2% answered 'almost always', i.e. a total of 69.4% of respondents, and 8.3% answered 'never' and 6.8% 'almost never', i.e. a total of 15.1% of respondents, while 15.4% of respondents were neutral. There was no significant difference between the sexes in approving or disapproving 'artificial insemination' in this research.

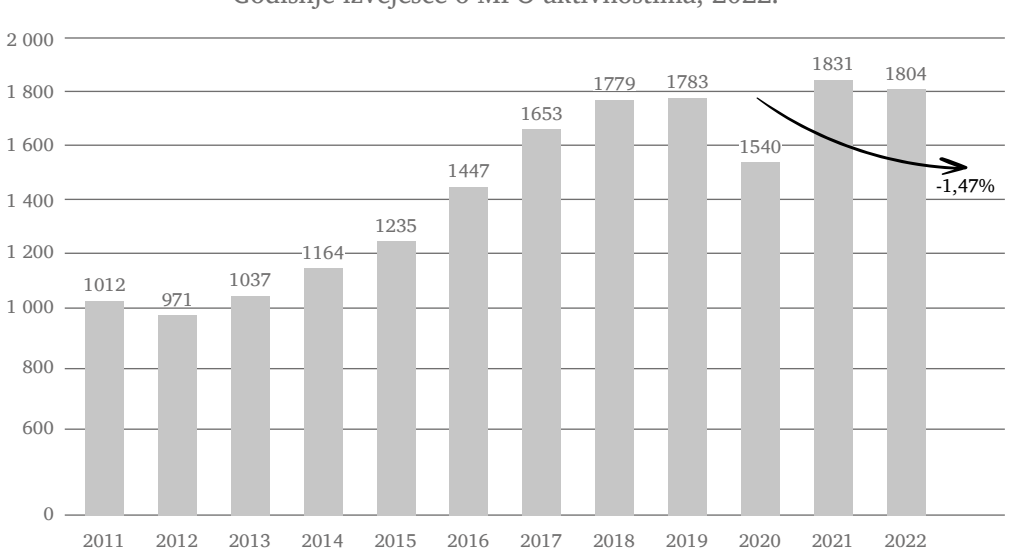
Irrelevant of public attitudes, medicine has been making constant progress. Medical experts emphasise that 'according to the Global Clinic Rating, Croatia is among the first 20 or so countries in terms of success'. Today, in 16 IVF centres in Croatia, 6000–7000 procedures of medically assisted fertilisation are performed annually, and 1600–1800 children are born. This is a significant 5% contribution to the decreased birth rate in Croatia. From the initial 5%, the overall success rate in recent years has reached 30%. During the 40 years of treatment with ART, 40 000 children

19 They complained because of 'unnecessary difficulties for patients and being denied the gold standard of treatment, as well as forcing medical professionals to adopt an unprofessional, unethical, and uneconomic approach to ART'. Further complaints were exposed, such as the restriction of fertilisation to maximum three oocytes, the prohibition of embryo freezing, the anonymity withdrawal for gamete donation, the discrimination against specific subgroups of patients based on sexual orientation and the mandatory psychological and legal counselling required prior to ART infertility treatment. Radončić, 2023, pp. 75–76.

20 Following a more liberal legislation in 2012 that permitted the cryopreservation of embryos, some Croatian citizens joined the initiative 'I was an embryo too', attempting to prevent legislation that would create surplus embryos. Čartolovni, Casini and Spagnolo, 2014.

21 The trigger was the regulation of new possibilities – the cryopreservation of embryos, and as a consequence, the creation of surplus embryos. 'First of all, we point at a statement that speaks of the need to sacrifice ten brothers and sisters to have one child'. A child born using the method of medically assisted reproduction is directly incriminated with the rhetoric of 'responsibility' for the destruction of innocent sisters and brothers and creates a negative image about his/her parents, which we consider absolutely unacceptable. Also, the development of a negative attitude towards children born this way may be encouraged in the general population and among other children. We condemn any inappropriate speech about children and appeal to the members of political parties, associations, and individuals to bear this in mind during their reactions and discussions that are heard and observed by children, who are important members of our society, and who, due to their developmental characteristics, deserve special protection and the considerate attitude of adults. See dijete.hr, 2012.

have been born in Croatia, and about 18 000 at the Petrova Clinic in Zagreb (till 2023). Only from 2015–2022, during the span of seven years, 12 000 children were born in Croatia thanks to the medically assisted fertilisation treatment.[22]



Graph No. 1
Number of children born through MAR 2011–2022 in Croatia[23]

The European Atlas of Fertility Treatment Policies (2024 Edition),[24] published by the Fertility Europe in collaboration with the European Parliamentary Forum for Sexual and Reproductive Rights[25] scores 49 countries and territories on access to equal, safe and efficient fertility medical treatments. It evaluates three criteria: legal regulations on access, public funding/reimbursement and patients' perspective,[26]

22 Šimunić, 2023, p. 381.
23 Ministarstvo zdravstva Republike Hrvatske, 2022. Graph redesigned by the author.
24 European Atlas of Fertility Treatment Policies, 2024.
25 The European Parliamentary Forum for Sexual and Reproductive Rights is a network of Members of Parliament throughout Europe committed to protecting the sexual and reproductive rights (SRHR) of all people, both at home and overseas. The Secretariat is based in Brussels.
26 Perfect country criteria are: legislation (dedicated ART laws for stable access), data management (National registers for MAR treatments and for donors), inclusive access (treatments and donor services are available to all who need them), genetic testing (access to genetic testing for embryos), transparency (non-anonymous donation with donor identity revealed to children), funding (full treatment funding for 4 IUIs and 6 IVF/ICSI cycles nationwide), support services (funded psychological support as part of the fertility treatments), consultation (policymakers consult patient associations on policies and legal changes), education (state-organised and funded fertility education programmes). Fertility Europe, European Atlas of Fertility Treatment Policies, 2024.

with a remark that the success of MAR is not the criteria of this evaluation. Croatia holds a high, eleventh position on this Atlas, accompanied closely by Hungary, Iceland, Germany and Spain.[27]

Various ethical problems came to light in public debates in connection with MAR technologies: *in vitro* technologies as such, heterologous technology (particularly the donation of *ova* and embryos), the choice of embryos, the cryopreservation of embryos, the destroying of cryopreserved embryos and surrogacy. Social policy discourse commenced as to who the beneficiary of MAR (*vide infra*) could be. Possible future issues in Croatia can also be foreseen regarding the 'three-parent technique',[28] the usage of artificial human sex cells,[29] and several others.

3. The Constitutional Framework

Human rights are strongly connected to reproductive rights, which may be overlapping and at times inseparable. Positive aspects of reproductive rights, such as the right to procreate, are often in the second row compared to the issue of abortion or access to contraception. The possibility of using ART and benefiting from ART come closest to the right to health, although there are debates about the issue.

Provisions of the Constitution of the Republic of Croatia[30] that are applicable to human rights issues related to ART are: (a) the right to healthcare,[31] (b) non-discrimination,[32] (c) the right to dignity and the right to privacy,[33] (d) the right to consciousness,[34] (e) the right of ownership,[35] (f) the right to life,[36] (g) the protection of children.[37]

27 European Atlas of Fertility Treatment Policies, 2024.
28 Schafer and Labude, 2017.
29 Hanzelou, 2022.
30 The Constitution of the Republic of Croatia (*Ustav Republike Hrvatske*), *Narodne novine* Nos. 56/90., 135/97., 8/98. – officially consolidated text, Nos. 113/00., 124/00. – officially consolidated text, Nos. 28/01., 41/01. – officially consolidated text, Nos. 76/10., 55/01. – officially consolidated text, 5/14., 85/10. – officially consolidated text. Translations of provisions in further footnotes: official translation of the Croatian Parliament. See sabor.hr, 2010.
31 Art. 58: 'Everyone shall be guaranteed the right to healthcare in accordance with law'.
32 Art. 14: 'All persons in the Republic of Croatia shall enjoy rights and freedoms, regardless of race, colour, gender, language, religion, political or other conviction, national or social origin, property, birth, education, social status or other characteristics. All persons shall be equal before the law'.
33 Art. 35: 'Respect for and legal protection of each person's private and family life, dignity, reputation shall be guaranteed'.
34 Art. 40: 'Freedom of conscience and religion and the freedom to demonstrate religious or other convictions shall be guaranteed'.
35 Art. 48 (1): 'The right of ownership shall be guaranteed'.
36 Art. 21: 'Each human being has the right to life'.
37 Art. 65: 'Everyone shall have the duty to protect children and infirm persons'.

The right to healthcare is the pillar stone of reproductive rights, especially when a couple suffers from infertility. The right to healthcare is anchored in the determination of the Republic of Croatia as a social state.[38] Some experts argue that only medical infertility should entitle a couple or an individual to seek medical treatment. The World Health Organization defines infertility as

> a disease of the male or female reproductive system defined by the failure to achieve a pregnancy after 12 months or more of regular unprotected sexual intercourse. Infertility may occur due to male, female or unexplained factors. Some causes of infertility are preventable. Treatment of infertility often involves in-vitro fertilisation (IVF) and other types of medically assisted reproduction.[39]

Thus, 'social infertility' or infertility due to the lack of a partner of the opposite sex would not lead to a medical cure facilitating assisted technologies.

This viewpoint leads to the issue of who is entitled to MAR procedures (a married or non-married heterosexual couple, registered homosexual partners, non-registered homosexual couples, a single woman with or without health issues, transgender persons etc.). These questions could raise the problem of discrimination concerning the status of a beneficiary. Croatian legislators opted for heterosexual married or non-married couples or a single woman who is not capable of conceiving a child due to her medical condition. Some complaints were raised about this decision, but the Constitutional Court of Croatia evidently decided to wait for the decision of legislators and instead of making the decision itself.[40]

38 Art. 1 of the Constitution; Smerdel and Sokol, 2005, p. 152.

39 World Health Organisation, 2024.

40 There were several requests to examine the constitutionality of acts that regulate medically assisted reproduction, but the Constitutional Court has never decided on merit. Some requests are staying in a drawer of the Constitutional Court, and the ex-president of the Constitutional Court of Croatia, Prof Jasna Omejec, (after the first comprehensive act on MAR was enacted in 2009) referred to the extremely negative attitude of the public, and many media reports that this practice must be overturned. Omejec, 2009.

Although an unborn child is not a person, it does have certain rights; for example in medicine, an unborn child is treated as a patient or in case of inheritance rights the *nasciturus* rule applies.[41]

The dignity of a human being is associated with the potential misuse of embryos[42] (and the interpretation of what misuse is). It is reflected in the preference of permitted assisted reproduction techniques (*vide infra*).

The right to privacy may be at risk when it comes to the non-anonymity of donors and, consequently, when the question of the right of the child to know his/her identity comes to the forefront. Besides the non-anonymity of the donor, 'all persons involved in the MAR procedure are obliged to keep all personal and health data of women, men, and children conceived in the procedure of medically assisted reproduction (professional secrecy)'.[43]

The right to conscientiousness is granted to medical staff by virtue of Art. 44 of the MAR Act, as healthcare and non-health professionals who should carry out or participate in medically assisted reproduction procedures have the right to invoke conscientious objection arising from their ethical, religious or moral views or beliefs and to refuse to perform or participate in medically assisted reproduction procedures.

The right to property is questionable as gametes might be considered as being in the ownership of gamete providers (intended parents or donors). Contrary, the European Court for Human Rights pointed out in *Parillo v. Italy*[44] case: 'Concerning Art. 1 of Protocol No. 1 (protection of property), the Court considered that it did not

41 Some medical doctors in Croatia consider foetus as a patient, for example Kurjak, 1991, and some adopted the dual-patient theory: 'From the discussion on the ethical status in general and on the ethical status of the pregnant woman and the foetus, as well as from the discussion on asymmetric ethics and the multidisciplinary-multiperspective approach to the problem of attitude towards life, it is concluded that the pregnant woman/woman and the foetusfoetus should be treated as two patients. However, it is important to point out that we are dealing with two patients of unequal status, that is, one moral subject and one moral object, whereby the first patient (who is the moral subject and object of the medical procedure) has priority over the second patient (who is the moral object and the object of a medical procedure). Since the status of the first patient is higher, regardless of the principle of respect for the status, interests and rights of the second patient, in conflict situations priority should always be given to the first patient, including the right of the first patient to decide on the fate of the second, considering the specific situation of these two entities'. Jurić, 2016.

42 Hrabar, 2007, pp. 40–41; Turković and Roksandić Vidlička, 2011.

43 Art. 45, para. 1 The MAR Act.

44 *Parillo v. Italy (GC)*, Application No. 46470/11, judgement 27 August 2015.

apply to the present case, since human embryos could not be reduced to 'possessions' within the meaning of that provision'.[45]

The right to life belongs to every human being. In the context of MAR may it be questionable if this right is possessed by an embryo. It is quite clear that human life begins with the fusion of female and male gametes – i.e. with fertilisation.[46]

The Constitutional Court of Croatia so far has not decided *in meritum* on the constitutionality of the provisions of the Act on Medically Assisted Reproduction[47] (although some media reported on the requests to assess its constitutionality).

The Constitution of the Socialist Republic of Croatia had a provision in place on the right to decide freely on the giving birth to a child,[48] along with Art. 191 of the Constitution of the Socialist Federative Republic of Yugoslavia.

The proclamation of the right to the free decision on giving birth to children could create a strong argument for the 'pro-choice' movement that this right should be unconditionally formulated in other legal acts. Since in 1990, it was not clear which political forces would develop the new legislation, the authors of the Croatian Constitution did not intend to predict the content of future laws, especially liberties or restrictions concerning abortion.

Although there is no constitutional provision that protects reproductive rights directly, Croatia is bound by the Convention on the elimination of all forms

45 German legal theory expressed another view: 'Although the body of a living human being is not a hing, its component parts themselves become things after they have been separated or removed. …. So sperm cells and eggs are things that are owned by a man and woman. With the fertilisation of the egg cell by a sperm cell both are joint owners according to the legal concept of Sec. 947 para. 1 *Bürgerliche Gesetzbuch* own 2-PN cell. Anyone who intentionally damages or destroys the 2-PN cell can be sued, on the grounds that the person damaged the property and committed a criminal offense in accordance with Sec. 303 of the Criminal Code' (translation from Germany by the Author) 2-PN cell is early, the 2nd day stage of the development of an embryo. Börger and Frister, 2010, p. 2. But, in case of the death of one of the genetic parents, the right to demand the return of the fertilised egg is not a property right that can be inherited, but rather a sui generis, a highly personal right. The partner cannot therefore inherit such a claim and therefore cannot assert such a claim alone. Who the owner of the embryo after the death of a patient is still not quite clear.

46 In 'the abortion-decision' of the Constitutional Court of the Republic of Croatia (Official Gazette No. 25/2017) the Constitutional Court asked for the opinion of a leading gynaecological clinic in Croatia (Petrova Clinic). 'In the opinion of the internal management of the Clinic for Women's Diseases and Obstetrics (...) it is stated that they unanimously concluded that life begins with the fusion of male and female gametes'. (para. 5.7.) In legal theory, the question was raised: 'Can advanced medical methods, with the use of high technology, support the birth of children and under what conditions? This question is being asked in many countries today and dominates the debate in Croatia'. Smerdel, 2020, p. 334.

47 There is only one decision on the inadmissibility of the complaint instigating proceedings for the assessment of constitutionality of the MAR Act 2012 (U-I-5640/2016, decision of the 9th of October 2018). Praksa Ustavnog Suda Republike Hrvatske, 2024.

48 Art. 272: 'It is a human right to decide freely on giving birth to child. This right may be restricted only for the protection of health'. (translation of the author). Constitution of the Socialist Republic of Croatia (*Ustav Socijalističke Republike Hrvatske*), Official Gazette No. 8-86/74. There is a possibility that the Constitution of the Republic of Croatia deliberately bypassed such a difficult issue as abortion. Hrabar and Peročević, 2023, p. 907.

of discrimination against women.[49] This Convention is a ratified international agreement, and as such by virtue of Art. 134 of the Constitution, the source of law at the domestic level. The Convention guarantees women: 'The same rights to decide freely and responsibly on the number and spacing of their children and to have access to the information, education and means to enable them to exercise these rights'.[50] That means that women in Croatia still have the right to decide on the number and spacing of their children, and that future Croatian law will have to be in accordance with this right (although it is not a constitutional right and is not an absolute one).

4. Current Legal Regulation on the Medical Aspects of MAR

Generally, the rights and duties of individuals as patients are regulated by the Healthcare Act,[51] the Act on Mandatory Health Insurance,[52] and the Patients' Rights Protection Act.[53] The more specific regulation on the medical aspects of MAR is the content of the Act on Medically Assisted Reproduction (the MAR Act).[54]

According to Art. 1 of the Healthcare Act, 'healthcare shall include a system of social, group and individual measures, services and activities for health maintenance and improvement, disease prevention, early disease detection, timely treatment and medical care and rehabilitation'. According to Art. 2: 'Everyone shall be entitled to healthcare and to the possibility of the attainment of an optimal health level under the provisions of this Act and the Mandatory Health Insurance Act'.

It is the duty of every person who acquired legal capacity to take actions to maintain and improve his/her health and to avoid any risk factors that might jeopardise his/her life and health.[55]

The State Health Insurance Fund covers MAR treatments. Treatment of infertility through the MAR procedure funded by the Croatian Health Insurance Fund includes four attempts at intrauterine insemination (IUI) and six attempts at *in vitro*

49 UN General Assembly, Convention on the Elimination of All Forms of Discrimination Against Women, 18 December 1979, United Nations, Treaty Series, vol. 1249, p. 13.

50 Art. 16, para. 1e.

51 The Healthcare Act (*Zakon o zdravstvenoj zaštiti*), Official Gazette Nos. 100/18, 125/19, 133/20, 147/20, 136/21, 119/22, 156/22, 33/23, 145/23, 36/24).

52 The Act on Mandatory Health Insurance (*Zakon o obveznom zdravstveno osiguranju*), Official Gazette No. 33/23.

53 The Patient Rights Protection Act (*Zakon o zaštiti prava pacijenata*), Official Gazette Nos. 169/04 and 37/08)

54 The Medically Assisted Reproduction Act (*Zakon o medicinski potpomognutoj oplodnji*), Official Gazette, No. 86/12. In text: the MAR Act.

55 Art. 27, para. 2 of the Healthcare Act.

fertilisation (IVF), with the obligation that two attempts be performed in a natural cycle.[56] A number of covered attempts are in line with the warning that overstimulation may trigger the risk of developing cancer at a later stage.[57]

The Patients' Rights Protection Act regulates who the patient is, and evidently, the beneficiary of the MAR procedure enjoys a patient status. A patient is considered to be any sick or healthy person who requests or is provided with a certain type of caretaking for the purpose of preserving and improving his/her health, preventing diseases, treatment, care and rehabilitation.[58] The status of a patient as the beneficiary of MAR treatments, as a couple or a woman who is not able to conceive naturally, and who had previously been unsuccessfully treated for infertility, for which he/she decided to undergo a medically assisted reproduction procedure.[59]

The principles of accessibility and humanity are basic principles of the Patients' Rights Protection Act. The first principle should ensure that all citizens, under equal conditions, undergo the MAR treatment.[60] This provision requires a standard that should be achieved, and even though all authorised medical clinics should ensure the same standard, it is not always the case, especially in demanding bio-medical reproductive technologies. In 2024 seventeen authorised medical institutions in Croatia offered MAR treatments: nine of them are public and eight of them are private.[61]

The MAR Act regulates the medical aspects of procedures, the beneficiaries of MAR, the rights and obligations of donors and the cryopreservation of gametes and embryos, the procedures of the MAR technologies, the prerequisites for the use of gametes, the method by which the medical technologies are operated, including different bans, authorised medical clinics, the National Commission for the Medically Assisted Reproduction, the functioning of the state registry for MAR, state supervision, and the provisions on misdemeanors during the performance of the MAR technologies. The act includes 64 comprehensive and coherent provisions.

Family law regulates the establishment of the origin of a child in the Family Act[62] (*vide infra*).

56 Art. 10 of the MAR Act. Some municipalities co-finance further medically assisted reproduction attempts in the amount of 40 to 80% of the entire cost; these financial supports are provided with the aim of increasing the birth rate. For Osijek see Decision on co-financing the costs of medically assisted reproduction in 2024, Official Gazette of City of Osijek, No. 3, 26. February 2024. See osijek.hr, 2024. Korać Graovac, 2024, p. 110.

57 'Due to the large number of studies, high doses of the ovulation-stimulating drugs and their repeated use with this method can increase the risk of the ovarian hyper stimulation syndrome (OHSS), and ovarian cysts, which can lead to ovarian cancer'. Fahrud et al., 2019.

58 Art. 1, para. 2.

59 Art. 4, para. 1 of the MAR Act.

60 Art. 5.

61 Register of authorised medical clinics – medically assisted reproduction (*Registar ovlaštenih medicinskih ustanova – medicinski pomognuta oplodnja)*. See zdravlje.gov.hr, 2024.

62 The Family Act (*Obiteljski zakon*), Official Gazette Nos. 103/15, 98/19, 47/20, 49/23 and 153/23.

The Criminal Code[63] also has certain provisions concerning MAR issues. It penalises the illicit trading of parts of the human body, including human tissues, gametes, embryos, or foetuses; cloning and altering the human genome;[64] mixing human sex cells with animal cells;[65] malpractice;[66] and the unauthorised taking and transplanting of parts of the human body, including tissues, gametes, embryos, and foetuses.[67] Listing human tissues, gametes, embryos or foetuses explicitly as the possible object of illicit trading was an important step forward.[68] Human trafficking for the exploitation for surrogacy is punishable by law.[69]

4.1. The MAR Act

After the first comprehensive legislation in 2009, which provoked much criticism (*vide supra*) the MAR Act 2012 was amended to reflect a more liberal approach. A more liberal approach was particularly represented in the beneficiaries of MAR, the possibility to cryopreserve surplus embryos created by IVF, and the possibility to donate eggs.

Provisions concerning the protection of the best interests of the child born through MAR were further substantiated through the permissible technologies, the beneficiaries of MAR, the provisions on donors, the provision of ART, including different bans, the cryopreservation of gametes and embryos and measures ensuring the quality of MAR services.

4.1.1. MAR Technologies

The primary objective MAR is

> to attain conception, pregnancy and the birth of a healthy child, complying with the requirements of modern medical science and experience, with special regard to the

63 The Criminal Code (*Kazneni zakon*), Official Gazette Nos. 125/11, 144/12, 56/15, 61/15, 101/17, 118/18, 126/19, 84/21, 114/22, and 114/23.

64 Art. 108 of the Criminal Code.

65 Art. 109 of the Criminal Code.

66 Art. 181 of the Criminal Code.

67 Art. 182 of the Criminal Code.

68 Medical and legal experts greeted this legislative change as an improvement of legal certainty ad further protection of human tissues, gametes and embryos. Zečević and Škavić, 2012, p. 41; Turković and Roksandić Vidlička, 2011. Conversely, some distinguished legal theoreticians considered gametes and embryos to be parts of the human body as well. Bačić and Pavlović, 2004, p. 860. The discussion evolved about the nature of ova when an eminent gynaecologist allegedly stole ova and used them to attain the pregnancy of another women, without getting the consent of all the patients. The charge were dismissed as women who gave birth to children conceived by possibly stolen ova declined to take DNA examination.

69 Art. 106 of the Criminal Code.

> protection of women's health, reducing the risk of the treatment and ensuring the welfare of the offspring.[70]

The welfare and health of the forthcoming child should be the primary focus, representing the commonly accepted highest values. The World Health Organization emphasises: 'Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity'. It is clear that it includes all aspects of a person, not just physical health, but also mental and social health.

As family is of crucial importance for the development of a healthy person,[71] legislators must set up legal provisions in order to secure a good family environment for a child as far as possible. According to Art. 10, paras. 1 and 2 of the MAR Act, a beneficiary of MAR needs to be capable of taking care of a child, although medical clinics don't examine if an intended parent is capable of exercising parental responsibilities.[72] A clear parallel may be drawn with adoption, as, similarly, the state allows adults to become parents. But, as there is no recognised right to become a parent, there are also differences, as intended parents enjoy the right to health, and providing a possibility to achieve pregnancy is also a part of a medical treatment (and healing) procedure. In the case of adoption the state has a duty to find the best possible adopting parents in order to protect the best interests of the (already born) child.

The Croatian legislation opted for the *ultima ratio* principle as one of the principles[73] governing MAR. A patient may get medical assistance 'only when the previous treatment of infertility has been unsuccessful or unpromising and when it is necessary to avoid, in the cases of natural conception, the transmission of a serious disease onto the child'.[74] Heterologous techniques (the use of donor gametes) can only be used

> when it is not possible to use one of the spouse's or extra-marital partner's own gametes in the procedure of medically assisted reproduction, or when medically assisted reproduction is carried out to prevent the transmission of a serious hereditary disease to the child.[75]

70 Art. 2 of the MAR Act.

71 For example, see attachment theory – Bowlby, 1969; theory of psychosocial development – Erikson, 1980; ecological systems theory – Bronfenbrenner, 1992. Several other psychologists emphasise the importance of family for the mental health of an individual.

72 Medical clinics are mostly satisfied with the fulfilment of formal requirements, such as marital or personal status, age or medical conditions.

73 Korać Graovac, 2024, pp. 107–108.

74 Art. 4, para. 1 of the MAR Act.

75 Art. 8, para. 1.

Intrauterine insemination should always be used before IVF treatment when donated gametes are used.[76]

That means that homologous techniques have a priority over heterologous ones if conception can be achieved through the homologous technique (using gametes of the couple).

The various medically assisted techniques are named precisely named in the MAR Act: intrauterine insemination (IUI), *in vitro* fertilisation (IVF), intracytoplasmic sperm microinjection (ICSI), cryopreservation of gametes and embryos and their defrosting, transfer of gametes or embryos into the fallopian tube, and preimplantation genetic diagnostics. Some of these procedures may be homologous or heterologous.[77] Of the total number of MPO procedures performed in 2022, most procedures were performed using intracytoplasmic sperm injection (35%), followed by the transfer of cryopreserved embryos (26%), IVF techniques (23%), intrauterine insemination with a frequency of 15%, and secondary intracytoplasmic sperm injection (1%). A total of 1804 children were born from these procedures in 2022.[78]

Selecting the sex of the future child is ethically unacceptable, so it is prohibited; the only exception is selecting the sex of a child in order to avoid a serious hereditary disease related to sex,[79] that is inherited by either the (female) X or the (male) Y gene.[80] The National Commission for Medically Assisted Reproduction is responsible for the approval of the selection of the sex of the child.[81]

The prohibition of cloning protects the dignity of a future child – the creation of a human being or part of a human being genetically identical to another human being, whether alive or dead is not permissible.[82] This prohibition is even more extensive than the prohibition of the cloning of human beings as part of the Additional Protocol to the Convention for the Protection of Human Rights and Dignity of the

76 Art. 8, para. 3 of the MAR Act.
77 Art. 9 of the MAR Act.
78 Medicinski pomognuta oplodnja, 2022.
79 Art. 27, paras. 1 and 2 of the MAR Act.
80 See Medline Plus, 2024.
81 Art. 27, para. 3 of the MAR Act.
82 Art. 32 of the MAR Act.

Human Being with regard to the Application of Biology and Medicine, on the Prohibition of Cloning Human Beings.[83]

'Contracts, agreements and other legal transactions of bearing children for another (surrogate gestational motherhood) and handing over a child after a fertility treatment, with or without a pecuniary remuneration, are null and void'.[84] Any form of surrogacy in Croatia is prohibited, regardless of the fact whether it is commercial or altruistic, traditional or gestational.

83 The Additional Protocol to the Convention for the Protection of Human Rights and Dignity of the Human Being with regard to the Application of Biology and Medicine, on the Prohibition of Cloning Human Beings ETS No. 168 '4. This Protocol does not take a specific stand on the admissibility of cloning cells and tissue for research purposes resulting in medical applications. However, it can be said that cloning as a biomedical technique is an important tool for the development of medicine, especially for the development of new therapies. The provisions in this Protocol shall not be understood as prohibiting cloning techniques in cell biology. 5. However, the Protocol does enshrine clear barriers against any attempt to artificially produce genetically identical human beings. The Protocol is not concerned with hormone stimulation to treat infertility in women and which might result in the birth of twins. It explicitly restricts genetic identity to sharing the same nuclear gene set, meaning that any intervention by embryo splitting or nuclear transfer techniques seeking to create a human being genetically identical to another human being, whether living or dead, is prohibited'. Explanatory Report to the Additional Protocol to the Convention for the Protection of Human Rights and Dignity of the Human Being with regard to the Application of Biology and Medicine, on the Prohibition of Cloning Human Beings, Paris, 12 January 1998 (European Treaty Series No. 168). The Republic of Croatia ratified this Protocol in 2003. Also of utmost importance for ART is the Convention for the protection of Human Rights and Dignity of the Human Being with regard to the Application of Biology and Medicine: Convention on Human Rights and Biomedicine (European Treaty Series No. 164).

84 Art. 31, para. 3 of the MAR Act. The EU Parliament 'condemns the practice of surrogacy, which undermines the human dignity of the woman since her body and its reproductive functions are treated as commodity; considers that the practice of gestational surrogacy which involves reproductive exploitation and use of the human body for financial or other gain, in particular in the case of vulnerable women in developing countries, shall be prohibited and treated as a matter of urgency in human rights instruments'. Para. 114 of the Annual Report on Human Rights and Democracy in the World 2014 and the EU Policy on the Matter. (European Parliament Resolution of 17 December 2015 on the Annual Report on Human Rights and Democracy in the World 2014 and the European Union's Policy on the Matter (2015/2229(INI)). In the year 2021, the European Parliament stated that it 'acknowledged that sexual exploitation for surrogacy and reproductive purposes… is unacceptable and a violation of human dignity and human rights'. Para. 32 The EU Strategy for Gender Equality, European Parliament Resolution of 21 January 2021 on the EU Strategy for Gender Equality (2019/2169(INI)). Directive (EU) 2024/1712 of the European Parliament and of the Council of 13 June 2024 amending Directive 2011/36/EU on preventing and combating trafficking in human beings and protecting its victims directly refers to surrogacy. Art. 1 Amendments to Directive 2011/36/EU. The Directive is amended as follows: (1) Art. 2 is amended as follows: '(a) para. 3 is replaced by the following: (b) 3. Exploitation shall include, as a minimum, the exploitation of the prostitution of others or other forms of sexual exploitation, forced labour or services, including begging, slavery or practices similar to slavery, servitude, or the exploitation of criminal activities, or the removal of organs, or the exploitation of surrogacy, of forced marriage, or of illegal adoption; (c) para. 5 is replaced by the following: '5. When the conduct referred to in paragraph 1 involves a child, it shall be a punishable offence of trafficking in human beings even if none of the means set forth in paragraph 1 has been used. This paragraph shall not apply to the exploitation of surrogacy as referred to in para. 3, unless the surrogate mother is a child'.

Similar to other states, intended parents attempt to circumvent this prohibition and seek surrogacy arrangements abroad, but most of these cases remain hidden.[85] Most media are benevolent toward such practice (for example welcoming news on the birth of a child by a surrogate mother in the USA, whose father is a popular Croatian actor).[86] It is not known if this child has also been registered in the Croatian birth recording system.

The way of evading the legal system is by having the child come to Croatia with a temporary birth certificate, generally issued by a Croatian consulate abroad (Ukraine was a popular in this sense), thus the child's origin is not revealed. Birth certificates carry the data specified in the certificate issued by the hospital where intended parents are entered as biological parents.[87]

The ban on human embryo experiments ensued from adhering to the principle of the protection of human dignity. It is also prohibited to facilitate the extracorporeal development of an embryo that is older than six days, fertilise a female egg with a seminal cell of any species other than the seminal cell of a human or an animal egg by the seminal cell of a human, change the embryo by transplanting other human or animal embryos, introduce human sex cells or human embryos into the animal, introduce animal sex cells or animal embryos into a woman, create human embryos for scientific or research purposes, or perform scientific or research work on an embryo.[88]

The rights of participants are obviously balanced: infertility treatment is allowed to a single woman in certain cases (see below: Beneficiaries of ART), but if a couple seeks medical help 'marriage or a non-marital union must exist at the time of placing sexual cells or embryos into a woman's body'.[89] Posthumous fertilisation is also banned, due to the provision referred to earlier. Furthermore, if the person who has provided and stored sex cells or tissues passes away, the medical institution must destroy the person's sex cells or tissues within 30 days of having learnt about the person's death.[90]

The explanation for such a legislative solution lies in the fact that a child has the right to be cared for by both parents. In a situation where one of the providers of gametes dies, the child would be deprived of the parental care of the deceased parent.

When prospective parents decide to use ART techniques, it is up to them to decide if two or more *ova* will be fertilised: the MAR Act offers the possibility for

85 One of the stories is exposed in the media: telegram.hr, 2024. Čulo Margaletić, Preložnjak and Šimović, 2019.

86 *Goranu i Ivani Višnjić zamjenska majka rodila sina. Večernji list*. See Pacek, 2011.

87 Like in ECtH case, *Paradiso and Campanelli v. Italy*, Grand Chamber Judgement of 24 January 2017, Korać Graovac, 2022, pp. 48–49; Hrabar, 2020; Preložnjak, 2020; Čulo Margaletić, Preložnjak and Šimović, 2019.

88 Art. 36 of the MAR Act.

89 Art. 11, para. 1 of the MAR Act.

90 Art. 33, para. 3 of the MAR Act.

patients to give their cognisant consent if they want embryos to be created for just one cycle, or they want more embryos to be created and subsequently cryopreserved. The ethical dilemma of protecting a woman from overstimulation due to hormonal therapy or to risk surplus embryos is the patients' decision.

However, the problem of stored embryos is complex and a paradox in some way: it is not possible for a woman to use an embryo that is fertilised by her egg as well (and by the sperm of her late husband), but it is possible to donate such embryo to another couple or woman. At the same time, as providers of the embryo (genetic parents) have not undergone screening procedures for genetic and other serious diseases, this embryo, according to ESHRE standards, should not be used.[91] Moreover, Croatian legislators ruled that such surplus embryos should preferably be used, not destroyed, but the use of them, due to the new medical standards of good practice, is impossible. It is also confusing that such an embryo may be donated to another single woman, while a woman who is a widow is not allowed to use it (or let it be destroyed).

Moreover, a high number of allegedly 10,000 cryopreserved embryos in Croatia's medical clinics (cryopreserved during a short period after the MAR Act 2012) somehow posed not just an individual, but a social and a political problem. Medical clinics hesitate to destroy cryopreserved embryos when the time limit of five years – the period the clinics are required to keep them at the state's expense – has passed, and the couple does not want to pay for the extension of cryopreservation. Medical clinics are reluctant to destroy embryos that are not wanted any more even at the request of the couple from whom they originate.

In the first case, the reason behind this is the fear of the potential court interpretation of the status of an embryo if prospective parents subsequently take legal action against the medical clinic. This fear is not without reason, as the Alabama Supreme Court in February 2024 ruled that frozen embryos are 'unborn children located outside of a biological uterus'.[92] The politically influential Catholic Church, and some medical professionals hold a similar position to that of Alabama's Supreme Court, stating that life is born at the moment of fertilisation and, consequently, should also be protected from this moment on.

4.1.2. Beneficiaries of MAR and the Best Interests of the Child

Naturally, the right to found a family is a human right, and the state should not interfere with this right. On the other hand, there is no such right as to become a parent, so the state is not obliged to allow everyone to fulfil his/her desire to have a child.

The legislator has to balance the interests of the intended parents and the interests of the (forthcoming) child. The best interests of the child is not represented by anyone yet, as the child to be born through ART has not yet been conceived.

91 ESHRE Working Group on Reproductive Donation, 2022.
92 See cases.justia.com, 2024. More: Ginod and Dahan, 2024.

However, it seems that the legislator is compelled to ensure that the child desired by the intended parents will receive adequate parental care.

Should the child welfare principle be interpreted so that the intended parents should be screened similarly to how they are screened in the case of adoption and fostering? On the other hand, the implication of screening patients to determine whether they have parental capacities, and thus making decisions about access to or the denial of medical treatment is contentious.[93]

The Croatian MAR Act provides guidance about eligibility – which is partly formal, partly more general.

The more formal precondition is that the beneficiaries of MAR are a man and a woman of legal age who have the legal capacity to make personal statements,[94] and who are married or live in a non-marital union. Non-marital spouses must provide a statement certified by a notary that they live in a non-marital union.[95]

These facts are quite simple to establish (through birth certificates or a statement). For a medical doctor, a specialist in reproductive medicine should play a role in providing medical help to establish that he previous infertility treatment remained unsuccessful or unfeasible' according to Art. 10, para. 2 of the MAR Act, through their patients' medical record.

It is not quite clear who is entitled to establish that patients, intended parents, are capable of exercising parental care (parental responsibilities), taking into account their age and overall health conditions (the condition stated in Art. 10, para. 1). It may be possible that there could be some individuals who are, for example, drug addicts and would like to use medical help in order to become parents, or some individuals with inferior mental capacity who are not deprived of their legal capacity in making personal decisions, or some individuals where there is a great age difference, e.g. a woman is in her forties, and her husband is in his seventies or even older. If a doctor of reproductive medicine is doubtful about their parental capacity, he/she would have a legally based reason to deny medical help.

It is clear from the legal provisions that Croatian legislators did not give priority to a couple's desire to become parents but also introduced the assessment of their capability to take care of the child.

A single woman who has reached the age of majority, has legal capacity and does not live in a marital, non-marital, or same-sex union; whose previous treatment of infertility has ended unsuccessfully or was futile; and who, due to her age and overall health condition, is capable of exercising parental care (parental responsibilities),

93 De Lacey, Peterson and McMillan, 2015, p. 617.

94 The MAR Act in Art. 10 para. 3. implemented Art. 23 of the Convention on the Rights of Persons with Disabilities, whereas a person with disabilities has the right to freely and responsibly decide on the number and spacing of their children. According to this requirement, a person who is not deprived of his/her legal capacity in making statements regarding his/her personal condition has the right to receive medically assisted reproduction.

95 Art. 11, para. 3 of the MAR Act.

may also seek MAR treatment.[96] The main reason for providing medical help to a single woman is medical.[97] The fact that she does not have a partner, or her sexual orientation, is not relevant.

There is another requirement against a woman: if she wants to use an assisted reproduction procedure covered by the Croatian Health Insurance, she must not over the age of 42 years. Exceptionally, the medical doctor overseeing the treatment is entitled to examine whether a patient is, due to her age and overall health condition, capable of caring for the child.[98] There are no measures to prevent this woman from seeking help in another licensed medical clinic if one of the clinics previously refused her the treatment.

So, single women are excluded, unless there is a medical reason; a man and a woman who do not live as a marital or non-marital couple but would like to conceive the child with medical help are also excluded, and same-sex couples are excluded from ART as well. These legal choices reflect political attitudes and reflect societal values as well. So far there were no constitutional decisions concerning this legislative position of the legislator.

The principle that a future child should, if possible, enjoy parental care by both parents, is encompassed in the stipulation that either marriage or non-marital union must exist at the time of the introduction of gametes or embryos into the woman's body.[99] Consequently, insemination or transfer of embryo *post-mortem* is not permitted. As there is no paternity presumption applicable in the case of a non-marital couple,

> in the procedure of medically assisted reproduction, the man shall be obliged to give a notary certified statement of acknowledgment of paternity of the child to be conceived before the procedure of medically assisted reproduction, and the woman shall be obliged to provide a notary certified statement of consent to the acknowledgment of the paternity of that child.[100]

A medical clinic is not permitted to perform an assisted reproduction procedure if these statements are not provided.

As stated above, there are some differences and some similarities in the regulation of MAR, compared to the regulation of adoption. Adoption is a family-law institute that is aimed at protecting a child without parental care and enabling the

96 Art. 10, para. 2 of the MAR Act.

97 Art. 10, para. 7 of the MAR Act provides clear instructions: 'A woman's reproductive capabilities are determined by a doctor specialising in gynaecology and obstetrics with a specialisation in human reproduction on the basis of ovarian reserve tests. In case of women over 42 years of age or women whose ovarian reserve tests are unfavorable, the doctor is obliged to warn them about the poor treatment results, the risks of treatment and pregnancy, and the risks to the child'.

98 Art. 10, paras. 4 and 5 of the MAR Act.

99 Art. 11, para. 1 of the MAR Act.

100 Art. 16, para. 2. of the MAR Act.

child to enjoy the right to family life. Simultaneously, adoption enables, and to enable prospective adopters to become legal parents (to found a family),

The most significant difference is that adoption is the best way to protect children who are already born and were left without parental care. In drafting the provisions of MAR, the rights and interests of a possible future child, a child who has not even been conceived and subsequently has not been born yet should be taken into account.

Another difference is that it is not possible to fulfil every request of the potential adopters, as there is an imbalance between the number of adoptable children and the number of potential adopters. So, it is obvious that not all of potential adopters will be permitted to adopt a child (in 2022 there were 833 potential adopters and 196 adopted children).[101]

Couples and individuals who are struggling with infertility are seeking medical help to exercise their right to health. Furthermore, some of them argue that even though they do not have medical problems, should have the right to seek medical help to become parents (in case of social infertility, sexual orientation etc.).

Similarities are that legislators set up a system of values to ensure that the child left without parental care or a future child will be cared for by a heterosexual couple (or an individual) where the child's best interests will be protected in advance. For adopters requirements are more formal, and they need have an opinion stating that they fulfil the requirements of adoption. Patients who seek medical help do not need such verification – they are left to the assessment of medical doctors. Hence, when patients seek help by using heterologous techniques, which may lead to some issues concerning upbringing of a donor-conceived child (who is not genetically related to one or both of them), the psychological consultation is requested.

ART procedures are, to a certain extent, regulated similarly to adoption when formal prerequisites (age, personal status, parental capacity, legal capacity, and others) are met. In Croatia, traditional families and in some cases single women are considered as the best choice to raise children, and this attitude is taken into account in the regulation of adoption and ART.

4.1.3. Heterologous Techniques and the Best Interests of the Child

According to Art. 7 para. 1 of the MAR Act 'in medically assisted reproduction procedures, preference shall be given to homologous fertilisation using the own gametes of the spouses or extramarital partners'. Heterologous techniques are a subsidiary choice due to more complex issues, as they involve a third person, a donor of gametes or a donor of embryos.

101 *Godišnje statističko o primijenjenim pravima socijalne skrbi* 2022, Ministry of Labour, Pension System, Family and Social Policy (*Ministarstvo rada, mirovinskoga sustava, obitelji i socijalne politike*), see Republika Hrvatska, 2023.

When donors' gametes or embryos are used, several values need to be protected: the health of the future child, the right to know the origin of the child, and the right to family life after the birth of a child. There are no unique answers to these issues in Europe, but Croatian legislators have offered legal provisions that comply with the values of Croatian society.

Donors may donate gametes or embryos (but not embryos created solely for donation).[102]

The main goal of assisted reproduction should be the birth of a healthy child, so medical clinics must perform, before proceeding with heterologous technologies, all necessary examinations and laboratory tests of donors and gametes prior to the selection and storage of semen and oocytes. The Minister of Health prescribes by ordinance procedures and criteria for the assessment of gamete donors, the procedures for the collection of gametes, the procedures for their receipt and their storage in the gamete bank, as well as the mandatory laboratory screening.

Gametes may be donated by a person who has reached the age of majority and has the legal capacity to consent to donation. To prevent the excessive donation of gametes, they can be donated only to one of the medical clinics (licensed for performing heterologous techniques). A medical clinic needs to report the existence of donated gametes to the gametes' bank and the State Register of MAR.[103] All these provisions have not been applied yet as a donor programme has not been introduced due to the lack of interest of potential donors.

According to the most recent census in 2021, Croatia is a small country with only 3.9 million inhabitants; therefore, there could be a significant danger that individuals get into contact with their half-siblings without being aware of their kinship. To prevent the birth of half-siblings who do not know about each other and to rule out incest, it is prohibited to use gametes or embryos of the same donors, after it has been established that three children have been born.

Donated gametes may be used for fertilisation after it has been assessed, following the medical requirements that they are suitable for fertilisation and that their use cannot cause harmful consequences in the health of the woman or the expected child.[104] As already pointed out, this is the reason why cryopreserved embryos cannot be used for donation,[105] although this is permitted by law. An embryo may be, as stated above, created only if it will be used by the couple. In that case,

102 Embryo donors are spouses or non-marital spouses who have given up using an embryo that was created for their procreation. Both of the donors are required to give their consent certified by a notary to the donation of their embryo to another couple or to a woman who is a beneficiary of ART.

103 Art. 20, paras. 1. and 3. of the MAR Act.

104 Art. 24 of the MAR Act.

105 A maximum of 12 embryos may be produced in one IVF procedure, and in principle, a maximum of two embryos can be transferred to the woman's womb (three if a woman is over 38 years old, and has some medical issues). Spouses (marital and non-marital) are obliged to declare in writing before initiating MAR proceedings whether they want the fertilisation of up to two or more eggs, as surplus embryos are cryopreserved (Art. 7 of the MAR Act). Korać Graovac, 2024, p. 112.

genetic parents do not go through health screening, so the donation of their embryos is not compliant with medical standards and is not permissible.

Although embryos do not have the legal status of (non-born) children, it is possible to envisage different attitudes toward this issue. Hence, an embryo cannot gain the status of a person in the current Croatian legal system.

Heterologous techniques can sometimes be challenging for parents and the child. Earlier, the social community adjudicated individuals who suffered from infertility, so couples concealed the fact of adoption or the use of medical help to attain pregnancy. This has changed since, but some subsequent psychological issues may still surface during the upbringing of the child, particularly regarding identity issues. Additionally, in the event of the breaking up of the family, one of the legal (but not genetic) parents may be more likely tempted to stop taking care of the child who is not genetically linked to him/her.

Therefore, the MAR Act requires prospective parents to complete compulsory psychological or psychotherapeutic counselling if they intend to use heterologous procedures.[106]

The real battlefield in Europe regards the right of the child (or donor-conceived person) to learn about his/her origin. Art. 7 para. 1 of the United Nations Convention on the Rights of the Child[107] and Art. 8 of the European Convention for the Protection of Human Rights and Fundamental Freedoms applies to donor-conceived children.[108]

Only Art. 8 of the European Convention for the Protection of Human Rights and Fundamental Freedoms applies to a donor-conceived adult person, and it encompasses, as interpreted by the European Court of Human Rights, 'the right to an identity and to personal development', which includes the right to access information that would make it possible to trace 'some of [one's] roots', the right of a person to know their origins and the circumstances of their birth. None of the Court's decisions have specifically involved the right of a person conceived by a donor's gamete to have the right to know the identity of the donor yet.

The Act on Medically Assisted Procreation (2009) enabled a donor-conceived person to find out the identity of the donor only if a donor agreed thereto.[109] Since

106 Art. 13 of the MAR Act.

107 Art. 7: '1. The child shall be registered immediately after birth and shall have the right from birth to a name, the right to acquire a nationality and, as far as possible, the right to know and be cared for by his or her parents…' Convention on the Rights of the Child, of 20 November 1989, United Nations Treaty Series, Vol. 1577, p. 3.

108 Art. 8, para. 1: 'Everyone has the right to respect for his private and family life, his home and his correspondence'. European Convention for the Protection of Human Rights and Fundamental Freedoms, Rome, 1950, European Treaty Series, No. 5.

109 Art. 10, para. 2 of the MAR Act

2012, Croatia has been applying Art. 7, para. 1 of the Convention on the Rights of the Child in and completely veiled the anonymity of donors.[110]

If parents choose so, the usage of ART may remain a secret inside the family, contrary to their obligation to inform their donor-conceived child at least by the age of majority on how he or she was conceived.[111] No one has control over the parents, so if they do not fulfil this obligation, a child may only accidentally find out the truth about his/her conception.[112] That means that legal provisions on donors' non-anonymity may easily retain a declaratory meaning. The right to identity of a donor-conceived will easily not be achieved, even though

> a person conceived and born with the help of medically assisted reproduction with a donated sperm cell or a donated egg or a donated embryo, if he/she has reached the

110 Reasoning is expressed in Draft of the Proposal of the MAR Act in 2012: 'The non-anonymity of amete or embryo donors is prescribed in order to protect the child's right to know his or her own origin, as protected in Art. 7 by the Convention on the Rights of the Child, ratified by the Republic of Croatia ('Official Gazette of the SFRY', No. 11/81, 'Official Gazette – International Treaties' No. 12/93). In Art. 7, para. 1 of the Convention on the Rights of the Child states that a child has: 'as far as possible, the right to know who his parents are'. The Committee on the Rights of the Child, to which states submit regular reports on the application of the Convention, criticises the non-application and endangerment of this right. In the case of medically assisted reproduction with a donated gamete, i.e. an embryo, it cannot be claimed that it is not possible to determine the origin of the child. In addition, the right of the child stipulated this way is a reflection of modern understandings in developmental psychology and child psychiatry that clear knowledge of one's own origin forms a healthy mental identity of an individual and the possibility of building quality personal relationships with other people'. See Republika Hrvatska Ministarstvo zdrastva, 2012. (The author's translation). Argumentation for this choice was expressed in legal literature: 'What is the meaning of 'im/possible'? Objectively or subjectively is impossible? It is objectively impossible when we cannot find the mother (and consequently the father) or when the mother does not know which of the many men conceived her child. Let us ask ourselves, is it not possible to know who donated the gamete? Isn't there a donor registration and a preliminary procedure that confirms or eliminates them? Should insisting on not recognising the truth and the turmoil about the origin of the child from medical insemination simply be attributed to the protection of the personality of the donor? The exculpation about the impossibility ('as far as possible') is an illusion of the truth that we do not want, not that we cannot, find out about the child's origins, that is, we want to deprive him of knowledge about his ancestors'. Hrabar, 2010, p. 430. At that time such an approach was quite uncommon in the comparative legal system, although in contemporary European policies, more and more states accept this approach concerning the anonymity of donors.

111 Art. 15, para. 2 of the MAR Act.

112 Greater usage of consumer DNA testing may break the secret. By the year of 2019, more than 26 million consumers had added their DNA to four leading commercial ancestry databases, which may increase to 100 million within a few years according to estimates by the MIT Technology Review. Family secrets are being revealed if donors and other donor-conceived persons provide commercial DNA database with their data. Regaldo, 2019.

> age of eighteen, has the right to access the Register of Conception Data and all data on his/her biological origin, including the information on the identity of the sperm cell donor or egg donor, i.e. the embryo donor … which is kept at the State Register of Medically Assisted Reproduction of the Ministry of Health.

If it is necessary to reveal the identity of a donor, for medically justified reasons, and the person's well-being, access to the data on the donor of gametes or embryos shall be provided to the legal representative of a donor-conceived child or the doctor. The National Commission for Medically Assisted Reproduction should approve this request.[113] The donor and the child do not have any family-law obligations or other mutual obligations or rights.[114]

The consequence of the non-anonymity concept[115] was that donors ceased to participate in a donor programme, so currently there are no donor and no gamete bank in Croatia.

113 Art. 15, paras. 1 and 3.

114 Art. 19, para. 5.

115 Recommendation 2156 (2019) on 'Anonymous donation of sperm and oocytes: balancing the rights of parents, donors and children', Points 2 and 3: 'In recent decades, there has been movement towards the recognition of a right to know one's origins, connected to the right to an identity and to personal development: in international human rights law, through its inclusion in the United Nations Convention on the Rights of the Child as a 'stand-alone' right for children, and in European human rights law through the case law of the European Court of Human Rights, which has recognised this right as an integral part of the right to respect for private life. This right includes the right to access information that would make it possible to trace one's roots, to know the circumstances of one's birth, and to have access to certainty of parental filiation….However, this right is not absolute and must thus be balanced with the interests of the other parties involved in sperm and oocyte donation: principally those of the donor(s) and the legal parent(s), but also those of clinics and service providers, as well as the interests of society and the obligations of the State. The Parliamentary Assembly invited the Committee of Ministers to propose a legally binding instrument based on the following principles: 7.1. anonymity should be waived for all future gamete donations in Council of Europe member States, and the use of anonymously donated sperm and oocytes should be prohibited. This would mean that (except in exceptional cases, when the donation is from a close relative or friend) the donor's identity would not be revealed to the family at the time of the donation, but to the donor-conceived child upon their 16th or 18th birthday. The donor-conceived child would be informed at that time (ideally by the State) of the existence of supplementary information on the circumstances of their birth.…; 7.2. the waiving of anonymity should have no legal consequences for filiation: the donor should be protected from any request to determine parentage or from an inheritance or parenting claim… The donor should have no right to contact a child born from donation, but the donor-conceived child should be given the option to contact the donor, as well as possible half-siblings, after their 16th or 18th birthday – subject to certain conditions being met; 7.3. Council of Europe member States that permit sperm and oocyte donation should set up and run a national donor and donor-conceived person register with a view to facilitating the sharing of information, as stipulated in paras. 7.1 and 7.2, but also with a view to enforcing an upper limit on the number of possible donations by the same donor, ensuring that close relations cannot marry and tracing donors if the medical need should arise. Clinics and service providers should be required to keep and share adequate records with the register, and a mechanism should be established to provide for cross-border exchanges of information between national registers; 7.4. the anonymity of gamete donors should not be lifted retrospectively where anonymity was

Donors are obviously reluctant to reveal their identity to their biological children. Couples therefore travel abroad, where a donor programme is offered. The state provides financial support, but before gametes or embryos are transferred to a medical clinic abroad the consent of the National Commission for Medical Assisted Reproduction is required. The National Commission started the practice of requesting a statement from the couple that no surrogacy service would be used and that the child should be conceived in a medical clinic where the child would be able to find out the identity of the donor (if these heterologous techniques will be used). This approach is currently maintained, as it is held that the entire ART procedure is a unique one, so the State is responsible for securing the right of the child who may have been donor-conceived abroad.[116] New SoHO regulation[117] will also help the traceability of gametes and embryos.

4.1.4. Family Law Regulation

When a child is conceived by assisted reproduction, it can be by homologous or heterologous. If a child is conceived by homologous technique, it is obvious that the parents may only be a woman and a man who had undergone an assisted reproduction procedure.

The Family Act dedicated special provisions regulating the origin of the child conceived by heterologous assisted reproduction technique.[118]

The mother of the child conceived by a donated egg or a donated embryo in the procedure of medically assisted reproduction is the woman who gave birth to the child (*presumptio iuris et de iure*). This family law provision is in harmony with the MAR Act that prohibits surrogate motherhood.

Family law protects the will of the intended parents (reflected in the consent for the specific procedure of assisted reproduction), and certainty of the legal affiliation of the child as well, so

promised at the time of the donation, except for medical reasons or where the donor has consented to the lifting of the anonymity and thus inclusion on the donor and donor-conceived person register…; 7.5. these principles should be applied without prejudice to the overriding consideration that gamete donation must remain a voluntary and altruistic gesture with the sole aim of helping others, and thus without any financial gain or comparable advantage for the donor'. See European Committee on Legal Co-operation, 2023.

116 The Croatian Health Insurance financially supports couples or women if they use the donor program in states where the identity of the donor is accessible to the child. There are intensive efforts to enable at least the import of gametes from trusted gamete banks.

117 Regulation (EU) 2024/1938 of the European Parliament and of the Council of 13 June 2024 on the standards of quality and safety for substances of human origin intended for human application and repealing Directives 2002/98/EC and 2004/23/EC (Text with EEA relevance), PE/8/2024/REV/1

118 Maternity in Art. 82 and paternity in Art. 83. Hrabar, 2012; Jurin and Miškić, 2020; Korać Graovac, 2021, pp. 66–68.

> it is not permitted to contest the maternity of a child conceived in the procedure of medically assisted reproduction if the consent has been given for a specific type of reproduction under the provisions of the regulations governing medically assisted reproduction.[119]

If a child is conceived by assisted reproduction without the consent required under medically assisted reproduction provisions, a woman who is registered in the birth register as the mother of the child or a woman who considers herself the mother of the child may contest maternity.[120] A woman who has been entered into the register of births as the child's mother may dispute this maternity lodging a lawsuit within six months from the discovery of the fact that rules out her maternity, and at the latest by the time the child has reached his/her seventh birthday. This provision is intended for a woman who gave her consent to the homologous procedure, but another woman's eggs were used.

A woman who considers herself the mother of the child (whose egg cell was used in an assisted reproduction procedure without her consent) can dispute the maternity of the woman who was entered into the register of births as the mother, and at the same time should lodge the lawsuit to establish her own maternity. The suit may also be lodged in a time period of six months from having found out that she is the mother of the child and at the latest by the child's seventh birthday.[121]

Setting time limits preserves legal certainty and ensures that a child who has a family life with his/her parents will continue to be part of that life.

Pater est quem nuptiae demonstrant rule also applies to the mother's husband, when a child is conceived with donated semen or a donated embryo in the procedure of medically assisted reproduction if the child was born at the time of the marriage or within a period of up to three hundred days from the termination of the marriage and if the husband has given his notary certified consent to the specific procedure of medically assisted reproduction. The father of the child will be a non-marital spouse (common-law spouse)[122] if he gives his paternity acknowledgment certified by a notary, and the mother of the child gives her consent to her non-marital spouse's acknowledgment of the child.[123] The woman must consent to the acknowledgment

119 Art. 82, para. 1 of the Family Act. According to Art. 14, paras. 2–6 of the MAR Act the notary certified consent shall be given in advance for each specified assisted reproduction procedure, and the origin of the gametes or embryos. Patient(s) may withdraw their consent and retreat from the procedure of assisted reproduction as long as the sperm cells, oocytes or embryos have not been transferred into the woman's body. The medically assisted procedure shall be terminated when one or both spouses withdraw their consent. The medical clinic shall record the statement on the withdrawal of consent and, at the request of the woman or man, issue a written confirmation thereof.

120 Art. 82, para. 2 of the Family Act.

121 Similar to the general period of time for the contestation of motherhood in Arts. 401–403 of the Family Act.

122 Regulation of non-marital union that is informal in Croatia: Korać Graovac, 2021.

123 Art. 16, para. 2 of the MAR Act.

of paternity in advance to ensure that she will not change her mind and restrict her spouse from becoming a legal parent.

Similarly to adoption, it is not permitted to contest the paternity of a donor-conceived child if the consents were acquired prior to the birth of the child.

The same rules for the contestation of fatherhood apply as for the contestation of motherhood: if a child is conceived through the procedure of assisted reproduction without the required consents, paternity may be disputed by the man who is registered as the father, or by those whose semen was used in the assisted reproduction procedure.

The time limit for contest of a mother's husband is six months from having found out that he is not the father of the child and at the latest by the child's seventh birthday. A man who has acknowledged the child (non-marital father) may contest his fatherhood six months after having found out that is not the father, but the latest by the child's seventh birthday.[124]

Another man (whose sperm had been used without his consent) may dispute the paternity of the man who is registered as the father of the child, but the lawsuit should be filed within six months from the date of having found out that the fertilisation took place without his consent, and no later than the child reaching his/her seventh birthday.

All these rules protect the parenthood established with the help of assisted reproduction and adequate consent. Interestingly, the donor-conceived child never has the right to contest his or her origin, although he/she is the one whose consent was not required. A child only has the essential right to know his/her origin (if he/she was informed about the circumstances of conception).

5. The Rights of the Child and ART in Croatia – Final Remarks

In general, Croatia has a good assisted reproduction legislation in place, which balances the rights of the child, the rights of intended parents (patients) and the rights of donors prudently, according to social and cultural values.

Interest in MAR is increasing, as there are more and more couples who cannot conceive naturally, although there are many legal, ethical, and other issues.

The rights belong to the born child, an adult person conceived by assisted reproduction, or, rarely and with suspensive effect, to the non-born child. The most important rights are the right to be cared for by both parents (through the ban on *post-mortem* fertilisation and conception, surrogacy, and through the choice of beneficiaries of ART), the right to health (through donor screening, limitation of the

124 Arts. 401 and 402 of the Family Act.

excessive transferring of embryos to a woman's womb), and the right to know the child's origin (although there is no mechanism to compel parents to inform children about their donor-conceived status).

Croatian legislation takes into account ethical considerations (for example prohibition of cloning, creating chimeras, ban on surrogacy) and attempts to preserve family stability through the provisions of family law (legal certainty of the child's origin by prohibiting the contestation of maternity or paternity if the required consents have been provided).

The legal system protects traditional values, but there is also some room for compromise between traditional societal values and the modern approach to reproductive rights. The fact that no donor programme exists due to the lack of interest of potential donors causes a problem. The state endeavours to overcome this situation by financing medical help abroad.

References

Bačić, F., Pavlović, Š. (2004) *Komentar Kaznenog zakona*. Zagreb: Organizator.

Baetens, P., Devroey, P., Camus, Van Steirteghem, A.C., Ponjaert-Kristoffersen, I. (2000) 'Counselling couples and donors for oocyte donation: the decision to use either known or anonymous oocytes', *Human Reproduction*, 15(2), pp. 476–484 [Online]. Available at: https://doi.org/10.1093/humrep/15.2.476 (Accessed: 28 September 2024).

Bay, B., Larsen, P.B., Kesmodel, U.S., Ingerslev, H.J. (2014) 'Danish sperm donors across three decades: motivations and attitudes', *Fertility and Sterility,* 101(1), pp. 252–257 [Online]. Available at: https://doi.org/10.1016/j.fertnstert.2013.09.013 (Accessed: 28 September 2024).

Binet, J.R. (2022) 'Access of persons conceived by gamete donation to information on their origins', Comparative study, Council of Europe [Online]. Available at: https://rm.coe.int/cdcj-2021-20e-final-publication-format-17122022/1680a97134 (Accessed: 28 September 2024).

Bronfenbrenner, U. (1992) 'Ecological systems theory' in Vasta, R. (ed.) *Six theories of child development: Revised formulations and current issues.* London: Jessica Kingsley Publishers, pp. 187–249.

Bowlby, J. (1969) *Attachment and loss*. New York: Random House.

cases.justia.com (2024) 'Supreme Court of Alabama, SC-2022-0515' [Online]. Available at: https://cases.justia.com/alabama/supreme-court/2024-sc-2022-0579.pdf?ts=1708115406 (Accessed: 18 September 2024).

Casteels, P., Nekkebroeck, J., Tournaye, H. (2024) 'Perspectives on sperm donor anonymity: insights from donor-conceived adults in Belgium', *Human Reproduction*, 39(9), pp. 2021–2031 [Online]. Available at: https://doi.org/10.1093/humrep/deae160 (Accessed: 28 September 2024).

Čartolovni, A., Casini, M., Spagnolo, A.G. (2014) 'The Regulation of the Medically Assisted Reproduction (MAR) in Croatia and the European legislative context', *Medicina et morale,* 63(6), pp. 997–1025 [Online]. Available at: https://doi.org/10.4081/mem.2014.38 (Accessed: 28 September 2024).

Čulo Margaletić, A., Preložnjak, B., Šimović, I. (2019) 'Presumption of motherhood on crossroad of surrogacy arrangements in EU', *EU and Comparative Law Issues and Challenges Series*, 2019/3, pp. 778–802 [Online]. Available at: https://doi.org/10.25234/eclic/9031 (Accessed: 28 September 2024).

dijete.hr (2012) 'Neovisno o načinu začeća sva su djeca jednaka!' [Online]. Available at: https://dijete.hr/hr/neovisno-o-nainu-zaea-sva-su-djeca-jednaka/ (Accessed: 6 November 2024).

De Lacey, S.D., Peterson, K., McMillan, J. (2015) 'Child interests in assisted reproductive technology: how is the welfare principle applied in practice?', *Human Reproduction*, 30(3), pp. 616–624 [Online]. Available at: https://doi.org/10.1093/humrep/deu343 (Accessed: 28 September 2024).

de Sutter, P. (2019) 'Explanatory Memorandum: Anonymous donation of sperm and oocytes: balancing the rights of parents, donors and children', Report, 20 February 2019 [Online]. Available at: https://assembly.coe.int/nw/xml/XRef/Xref-XML2HTML-en.asp?fileid=25439 (Accessed: 28 September 2024).

Draškić, M. (1992) 'Porodičnopravni aspekti artificijelne inseminacije', *Anali Pravnog fakulteta u Beogradu*, 40(4), pp. 239–264.

Erikson, E.H. (1980) *Identity and the life cycle.* New York: W W Norton & Co.

European Committee on Legal Co-operation (2023) 'Access to origins' [Online]. Available at: https://www.coe.int/en/web/cdcj/origins (Accessed: 17 October 2023).

Farhud, D., Zokaei, S., Keykhaei, M., Zarif Yeganeh, M. (2019) 'Strong Evidences of the Ovarian Carcinoma Risk in Women after IVF Treatment: A Review Article', *Iranian journal of public health*, 48(12), pp. 2124–2132 [Online]. Available at: https://doi.org/10.18502/ijph.v48i12.3543 (Accessed: 27 September 2024).

Future Market Insights (2024) 'Infertility Treatment Market' [Online]. Available at: https://www.futuremarketinsights.com/reports/infertility-treatment-market (Accessed: 30 September 2024).

Ginod, P., Dahan, M.H. (2024) 'Embryos as unborn children: the Alabama Supreme Court's ruling and its possible impact for legal rulings in other states', *F&S reports*, 5(2), pp. 130–131 [Online]. Available at: https://doi.org/10.1016/j.xfre.2024.03.006 (Accessed: 27 September 2024).

Griessler, E., Hager, M. (2016) 'Changing direction: the struggle of regulating assisted reproductive technology in Austria', *Reproductive Biomedicine & Society Online,* 2016/3, pp. 68–76 [Online]. Available at: https://doi.org/10.1016/j.rbms.2016.12.005.,https://www.sciencedirect.com/science/article/pii/S2405661817300059 (Accessed: 27 September 2024).

Hodgkin, R., Newell, P. (2007) 'Implementation Handbook for the Convention on the Rights of the Child', Geneva, New York, UNICEF [Online]. Available at: https://www.unicef.org/lac/media/22071/file/Implementation%20Handbook%20for%20the%20CRC.pdf (Accessed: 27 September 2024).

Hrabar, D. (2007) 'Deontološka prosudba ljudskog dostojanstva u obiteljskom pravu', *Bogoslovska smotra*, 77(1), pp. 29–42 [Online]. Available at: https://hrcak.srce.hr/23489 (Accessed: 27 September 2024).

Hrabar, D. (2010) 'Pravni dosezi medicinske oplodnje u Hrvatskoj', *Zbornik Pravnog fakulteta u Zagrebu*, 60(2), pp. 415–442 [Online]. Available at: https://hrcak.srce.hr/51983 (Accessed: 27 September 2024).

Hrabar, D. (2012) 'Podrijetlo djeteta začetog uz medicinski pomognutu oplodnju' in Šimunić, V. (ed.) *Reprodukcijska endokrinologija i neplodnost – Medicinski pomognuta oplodnja IVF.* Zagreb: Školska knjiga, pp. 671–676.

Jurić, H. (2016) 'Majka i nerođeno dijete – jedan ili dva pacijenta?' in Blagaić, V., Čizmić, J. (eds.) *Pravni, etički i medicinski aspekti suvremenog vođenja poroda: Zbornik radova sa simpozija s međunarodnim sudjelovanjem.* Zagreb: Klinika za ginekologiju i porodništvo Medicinskog fakulteta Sveučilišta u Zagrebu Kliničke bolnice Sveti Duh, pp. 61–67.

Jurin Bakotić, V., Miškić, J. (2022) 'Zakonodavni okvir medicinski pomognute oplodnje u Republici Hrvatskoj', *Zbornik radova Veleučilišta u Šibeniku*, 16(3–4), pp. 153–174 [Online]. Available at: https://doi.org/10.51650/ezrvs.16.3-4.8 (Accessed: 27 September 2024).

Kirkman-Brown, J., Calhaz-Jorge, C., Dancet, E.A.F., Lundin, K., Martins, M., Tilleman, K., Thorn, P., Vermeulen, N., Frith, L. (2022) 'Good practice recommendations for information provision for those involved in reproductive donation', *Human Reproduction Open*, 2022/1, pp. 1–26 [Online]. Available at: https://doi.org/10.1093/hropen/hoac001 (Accessed: 27 September 2024).

Korać, A. (1999) 'Draft of the Croatian Act on Medically Assisted Procreation - Balancing Procreative Rights', *Društvena istraživanja*: *časopis za opća društvena pitanja*, 8(2–3), pp. 229–239.

Korać Graovac, A. (2021) 'Family Protection in Croatia' in Barzó, T., Lenkovics, B. (eds.) *Family Protection From a Legal Perspective*. Budapest–Miskolc: Central European Academic Publishing, pp. 37–76; https://doi.org/10.54237/profnet.2021.tbblfl_2.

Korać Graovac, A. (2021) 'Legal Development of Non-Marital Union in Croatia', *Law, Identity and Values*, 1(1), pp. 55–70 [Online]. Available at: https://doi.org/10.55073/2021.1.55-70 (Accessed: 27 September 2024).

Korać Graovac, A. (2022) 'Croatia: The Content of the Right to Parental Care' in Sobczyk, P. (ed.) *Content of the right to parental responsibility: Experiences – Analyses – Postulates.* Budapest–Miskolc: Central European Academic Publishing, pp. 37–72; https://doi.org/10.54237/profnet.2022.pscrpr_3.

Korać Graovac, A. (2024) 'Legal Regulation of Medically Assisted Reproduction in Croatia: Is the Grass Green Enough on Our Side?', *Law Identity and Values*, 4(2), pp. 101–122 [Online]. Available at: https://doi.org/10.55073/2024.2.101-121 (Accessed: 27 September 2024).

Koukoulis, A.N. (2023) 'Secrecy & anonymity in donor assisted conception and the right to genetic origins information: The current status in Greece', *Medicine, science, and the law*, 63(1), pp. 78–80 [Online]. Available at: https://doi.org/10.1177/00258024221112560 (Accessed: 27 September 2024).

Kovaček Stanić, G. (2008) *Legislativa o ljudskoj reprodukciji uz biomedicinsku pomoć.* Novi Sad: Centar za izdavačku delatnost – Pravni fakultet Novi Sad.

Kurjak, A. (1991) *Fetus kao pacijent.* Zagreb: Medicinska biblioteka.

Medicinski pomognuta oplodnja (2022) 'Sažetak statističke analize, Ministarstvo zdravstva Republike Hrvatske' [Online]. Available at: https://zdravlje.gov.hr/UserDocsImages/2024%20Objave/Godi%C5%A1nje%20izvje%C5%A1%C4%87e%20o%20MPO%20aktivnostima%20za%202022._9.10.2024._151654.pdf (Accessed: 27 September 2024).

Medline Plus (2024) 'What are the different ways a genetic condition can be inherited?' [Online]. Available at: https://medlineplus.gov/genetics/understanding/inheritance/inheritancepatterns/ (Accessed: 20 December 2024).

Ministarstvo zdravstva Republike Hrvatske (2022) *Medicinski pomognuta oplodnja, 2022. Sažetak statističke analize Godišnje izvješće o MPO aktivnostima u 2022. godini* [Online]. Available at: https://zdravlje.gov.hr/UserDocsImages/2024%20Objave/Godi%C5%A1nje%20izvje%C5%A1%C4%87e%20o%20MPO%20aktivnostima%20za%202022._9.10.2024._151654.pdf (Accessed: 9 December 2024).

Mulligan, A. (2022) 'Anonymous gamete donation and Article 8 of the European Convention on Human Rights: The case for incompatibility', *Medical Law International,* 22(2), pp. 119–146 [Online]. Available at: https://doi.org/10.1177/09685332221096210 (Accessed: 15 September 2024).

Muñoz, M., Abellán-García, F., Cuevas, I. (2019) 'Documento sobre posicionamiento de la Sociedad Española de Fertilidad respecto de la regla del anonimato en las donaciones de gametes, Madrid: Sociedad Española de Fertilidad (S.E.F.)' [Online]. Available at: https://www.cra.barcelona/wp-content/uploads/2019/10/posicionamientoAnonimato-Donantes-SEF.pdf (Accessed: 1 September 2024).

Nedić, T. (2016) 'Kaznenopravni i medicinskopravni aspekti (ne)dozvoljenog uzimanja i presađivanja dijelova ljudskog tijela u Republici Hrvatskoj', *Pravni vjesnik,* 32(1), pp. 55–77 [Online]. Available at: https://hrcak.srce.hr/161814 (Accessed: 27 September 2024).

Omejec, J. (2009) 'Oplodnja i porez pritišću sud' [Online]. Available at: https://www.057info.hr/vijesti/2009-08-19/oplodnja-i-porez-pritiscu-sud/ (Accessed: 28 September 2024).

osijek.hr (2024) 'Decision on co-financing the costs of medically assisted reproduction in 2024' [Online]. Available at: https://www.osijek.hr/wp-content/uploads/pdf/86-sufinanc%20trosk%20medicins%20pomognute%20oplodnje%202024.pdf (Accessed: 9 December 2024).

Pacek, T. (2011) 'Goranu i Ivani Višnjić zamjenska majka rodila sina' [Online]. Available at: https://www.vecernji.hr/showbiz/goranu-i-ivani-visnjic-zamjenska-majka-rodila-sina-309447 (Accessed: 20 December 2024).

Praksa Ustavnog Suda Republike Hrvatske (2024) 'Kroz Kazalo propisa' [Online]. Available at: https://sljeme.usud.hr/usud/praksaw.nsf/vKrozKazaloPropisa.xsp (Accessed: 23 October 2024).

Preložnjak, B. (2020) 'Modern challenges in the implementation of the child's right to know his origin', *EU and Comparative Law Issues and Challenges Series (ECLIC)*, 2020/4, pp. 1175–1203 [Online]. Available at: https://doi.org/10.25234/eclic/11944 (Accessed: 27 September 2024).

Radončić, E. (2023) 'The Ethical, Legal, and Social Issues Impacted by Assisted Reproductive Technologies in Croatia', *Donald School Journal of Ultrasound in Obstetrics and Gynecology*, 2023/17, pp. 74–78 [Online]. Available at: https://doi.org/10.5005/jp-journals-10009-1953 (Accessed: 27 September 2024).

Regaldo, A. (2019) 'More than 26 million people have taken an at-home ancestry test', 11 February 2019 [Online]. Available at: https://www.technologyreview.com/2019/02/11/103446/more-than-26-million-people-have-taken-an-at-home-ancestry-test/ (Accessed: 12 December 2024).

Republika Hrvatska (2023) 'Godišnje statističko izvješće o primijenjenim pravima socijalne skrbi, pravnoj zaštiti djece, mladeži, braka, obitelji i osoba lišenih poslovne sposobnosti, te zaštiti tjelesno ili mentalno oštećenih osoba u republici hrvatskoj u 2022. Godini' [Online]. Available at: https://mrosp.gov.hr/UserDocsImages/dokumenti/Glavno%20tajni%C5%A1tvo/Godi%C5%A1nje%20izvje%C5%A1%C4%87e%202022/Godi%C5%A1nje%20statisti%C4%8Dko%20o%20primijenjenim%20pravima%20socijalne%20skrbi%202022.pdf (Accessed: 17 December 2024).

Republika Hrvatska Ministarstvo Zdravlja (2012) 'Nacrt prijedloga zakona o medicinski pomognutoj oplodnji' [Online]. Available at: https://vlada.gov.hr/UserDocsImages//2016/Sjednice/Arhiva//21.%20-%201.pdf (Accessed: 1 September 2024).

Riano-Galán, C., Martínez González, C., Gallego Riestra, S. (2021) 'Cuestiones éticas y legales del anonimato y la confidencialidad en la donación de gametos', *An Pediatr (Barc)*, 94(5), pp. 74–78 [Online]. Available at: https://doi.org/10.1016/j.anpede.2021.02.004 (Accessed: 27 September 2024).

sabor.hr (2010) 'Committee on the Constitution, standing orders and political system of the Croatian Parliament' [Online]. Available at: https://www.sabor.hr/sites/default/files/uploads/inline-files/CONSTITUTION_CROATIA.pdf (Accessed: 8 November 2024).

Šimonović, D. (1996) 'Legal Regulation of Medically Assisted Procreation', Doctoral Thesis, University in Zagreb.

Šimunić, V. (2023) 'Forty years of successful assisted reproductive technologies in Croatia', *Croat Med Journal*, 64(6), pp. 377–382 [Online]. Available at: https://doi.org/10.3325/cmj.2023.64.377 (Accessed: 27 September 2024).

telegram.hr (2024) 'Moju kćer rodila je surogat mama iz Ukrajine. Nisam jedina u Hrvatskoj, ali sam prva koja govori za medije' [Online]. Available at: https://www.telegram.hr/price/moju-kcer-rodila-je-surogat-mama-iz-ukrajine-nisam-jedina-u-hrvatskoj-ali-sam-prva-koja-govori-za-medije/ (Accessed 18 September 2024).

Turković, K., Roksandić Vidlička, S. (2011) 'Reforma kaznenog zakonodavstva u području zdravstva' in Čizmić, J., Klarić, M., Šinković, Z. (eds.) *Zbornik radova Aktualnosti zdravstvenog zakonodavstva i pravne prakse, II. znanstveni skup*. Zagreb: Novalja, pp. 111–136.

WHO (2024) 'Infertility', 24 May 2024 [Online]. Available at: https://www.who.int/news-room/fact-sheets/detail/infertility (Accessed: 10 November 2024).

zdravlje.gov.hr (2024) 'HR Registar Ovlaštenih Ustanova – Medicinski Pomognuta Oplodnja' [Online]. Available at: https://zdravlje.gov.hr/UserDocsImages/2024%20NACIONALNI%20TRANPLANTACIJSKI%20PROGRAM/Registar%20ovla%C5%A1tenih%20ustanova-MPO.pdf (Accessed: 7 November 2024).

Zegers-Hochschild, F., Adamson G.D., Dyer, S., Racowsky, C., de Mouzon, J., Sokol, R., Rienzi, L., Sunde, A., Schmidt, L., Cooke, I.D., Simpson, J.L., van der Poel, S. (2017) 'The International Glossary on Infertility and Fertility Care', *Human Reproduction*, 32(9), pp. 1786–1801 [Online]. Available at: https://doi.org/10.1093/humrep/dex234 (Accessed: 27 September 2024).

Zečević, D., Škavić, J. (2012) *Kaznenopravna i građanskopravna odgovornost liječnika – teorija i praksa.* Zagreb: Medicinska naklada.