

TALLINN UNIVERSITY OF TECHNOLOGY

School of Business and Governance

Department of Law

Sanni Savonen

**COMPARATIVE ANALYSIS OF LEGISLATION IN FINLAND
AND THE UNITED STATES OF AMERICA REGARDING IN
VITRO FERTILIZATION**

Bachelor's thesis

Programme HAJB, specialization International and European Union Law

Supervisor: Jenna Uusitalo, MA in Law

Tallinn 2020

I declare that I have compiled the paper independently and all works, important standpoints and data by other authors have been properly referenced and the same paper has not been previously been presented for grading.

The document length is 8002 words from the introduction to the end of conclusion.

Sanni Savonen

(signature, date)

Student code: 166298HAJB

Student e-mail address: sasavo@ttu.ee

Supervisor: Jenna Uusitalo, MA in Law:

The paper conforms to requirements in force

.....

(signature, date)

Chairman of the Defence Committee: / to be added only for graduation theses /

Permitted to the defence

.....

(name, signature, date)

TABLE OF CONTENTS

ABSTRACT	4
INTRODUCTION	5
1. IN VITRO FERTILIZATION	7
1.1. IVF in Finland.....	7
1.2. IVF in the United States of America	9
2. HUMAN RIGHTS LAW.....	12
2.1. International Bill of Human Rights	14
2.2. European Convention on Human Rights.....	15
3. COMPARISON.....	17
3.1. General Restrictions on Use of Gametes and Embryos.....	17
3.2. Influencing Characteristics of Child.....	18
3.3. Age Limits.....	19
3.4. Surrogacy.....	21
3.5. Remuneration.....	23
CONCLUSION	25
LIST OF REFERENCES.....	28

ABSTRACT

This thesis compares the in vitro fertilization laws in Finland and in the United States of America. This thesis seeks to show that the United States of America should modify its domestic laws to comply with the international standards. The United States should take examples from Directives that Finland are bound by and create Directives that would set goals that must be achieved by all States but leave the way of achieving each goal for the States to determine. Methods used to conduct research are qualitative, such as academic literature and legislations. Human rights laws guarantee everyone the right to found a family and the right to health care, and with the way the United States is regulating IVF now, they are not following the international standards set out in international conventions.

Key words: In vitro fertilization, right to family, human rights, Finland, United States of America.

INTRODUCTION

Infertility is a common problem in humans around the world, and with the possibility to reproduce being one of the central basic needs of a humane life, different ways to assist reproduction are used to help humans conceive. One of these ways is in vitro fertilization.¹ In vitro fertilization is a five-step process where first a woman takes hormones to help eggs develop faster than they would during a typical month. Then the eggs are collected from the ovaries in a minor surgery. In the third step, the eggs are combined with sperm in a petri dish. In step four, an embryologist will monitor the embryos to see that they are dividing normally and are healthy. In the final step, the embryo is transferred into the woman's uterus and after ten days the woman returns to the clinic to find out if she is pregnant.²

In Finland, the legislation used for in-vitro fertilization is the Act on Assisted Fertility Treatments (1237/2006). The Act on Assisted Fertility Treatments has been amended twice in 2009, in 2012, in 2016 and in 2018. The amendment of 2018 affected IVF the most as it changed the law to allow IVF treatments for single women and female couples as well.³

In the United States of America laws regulating infertility treatment vary from state to state. On a federal level, the assisted reproductive technology regulation is a mixture of statutes and rules.⁴ There are ten states that follow the Uniform Parentage Act 2002, which are Alabama, Delaware, New Mexico, North Dakota, Texas, Utah, Washington and Wyoming. Of these states Texas requires an additional insurance for certain IVF procedures. Arizona is the only state that does not regulate assisted reproduction at all.⁵

¹ Söderlund, D. (1988). *Inseminaatio, in vitro fertilisaatio ja alkio: Vertaileva selvitys*. Helsinki: Valtion painatuskeskus.

² *5 Steps of the in Vitro Fertilization (IVF) Process*. Piedmont Healthcare. Retrieved from [www.piedmont.org/living-better/5-steps-of-the-in-vitro-fertilization-\(ivf\)-process](http://www.piedmont.org/living-better/5-steps-of-the-in-vitro-fertilization-(ivf)-process), 10 December 2018.

³ Laki hedelmöityshoidoista 1237/2006

⁴ *IVF Egg Donation Law and Legislation in USA*. EggDonationFriends.com. Retrieved from www.eggdonationfriends.com/country-month-usa/rules-regulations-usa/, 10 December 2018.

⁵ Nsien, I. E. (2017) Navigating the Federal Regulatory Structure of Assisted Reproduction Technology Clinics. *American Bar Association Health eSource*, 14(3).

The research problem is that as the United States does not have specific laws on in vitro fertilization, it is not guaranteed that all citizens have the right to found a family or a right to healthcare. For these reasons the United States breach the human right contracts they have ratified. The main research question of this thesis is what are the main differences of legislation in Finland and the United States of America concerning IVF? Another research question is that could these systems benefit each other and in what ways? The author's hypothesis is that the United States of America should modify their domestic laws to comply with international standards. The reason for choosing these countries for comparison was to compare one country, Finland, that has specific laws on assisted reproduction treatments, to a country, the United States of America, with very few laws on assisted reproduction technology.

The aim of this thesis is to compare the in vitro fertilization laws in Finland and in the United States of America. The comparison is between the positive and negative sides of both laws and the aim is to find out how the countries could benefit from the positive and negative sides of the other countries' laws.

In this thesis, the author uses qualitative research methods in the use of academic literature found in books, publications and journals. All sources are referred to in the footnotes and in the reference list. In this thesis the author will research five sections of the Finnish IVF laws and compare them to the laws in the United States of America and analyze whether the laws of the countries are in line with the human rights conventions and other legislations. The author of this thesis does not suggest changes to the international conventions or other legislations relevant to the subject, but rather improvements that both countries could make to achieve the goals set in the international conventions and other legislations.

The first chapter of this thesis introduces in vitro fertilization in Finland and in the United States of America and which laws regulate the practice of assisted reproduction in these countries. The second chapter will research which human rights conventions affect in vitro fertilization and the right to a family and to health care. The final chapter is a comparison of the laws in Finland and the United States of America and an analysis on how both countries should change their laws to be in accordance with conventions of human rights.

1. IN VITRO FERTILIZATION

In vitro fertilization (IVF) comes from the Latin words *in vitro fertilisatio*, meaning fertilization in a glass. The goal of in vitro fertilization is to connect a sperm cell into an egg cell and create fertilization. IVF can be used to overcome nearly all types of infertility.⁶ In vitro fertilization is a relatively new technique with the first successful IVF taking place in 1969, when Cambridge physiologist Robert Edwards and obstetrician Patrick Steptoe conducted the first IVF of a human egg cell. The process was first rebuked and told to be worthless and unethical.⁷ The first IVF baby was born in the United Kingdom in 1978, and the technique is enhanced continuously.⁸ In 2010 Edwards was awarded the Nobel Prize in medicine for his work.⁹

1.1. IVF in Finland

In Finland, every sixth couple in fertile age is unable to reproduce.¹⁰ About 21% of women and 14% of men reportedly experience infertility.¹¹ Around 3,3% of babies born in Finland annually are born as a result of IVF treatments.¹² In Finland, patients can receive fertility in the public sector, where women can receive up to three treatments, or an unlimited amount of treatments in the private sector.¹³

⁶ Tiitinen, A., Hovatta, O. (2004). Lapsettomuus. In: O. Ylikorkala, A. Kauppila (Eds.), *Naistentaudit ja synnytykset* (189) Keuruu: Kustannus Oy Duodecim.

⁷ Ball, P. (2018 July 8). Seven ways IVF changed the world – from Louise Brown to stem-cell research, *The Guardian*.

⁸ Bonnicksen, A. L. (1991) *In Vitro Fertilization – Building Policy from Laboratories to Legislatures*. New York: Columbia University Press.

⁹ Ball, P. (2018) *Supra nota 7*.

¹⁰ Tulppala, M. (2002). Lapsettomuuden tuska. *Duodecim* 118, 531-536.

¹¹ Klemetti, R. (2016). *Sexual and Reproductive Rights, health and services in Finland*. Retrieved from <https://www.slideshare.net/THLfi/sexual-and-reproductive-rights-health-and-services-in-finland>, 11 December 2018.

¹² Kaartinen, N., Tinkanen, H. (2017). Syntykö koeputkihedelmöityshoidolla terveitä lapsia?, *Duodecim* 8, 728-734.

¹³ Klemetti (2016), *supra nota 11*.

The first IVF baby in Finland was born in 1984 in Helsinki University Hospital and the second baby two weeks later in Turku University Hospital.¹⁴ Turku University Hospital was the first hospital in Finland to start using IVF treatments in 1982.¹⁵

The methods used in IVF have given rise to legal and ethical questions. Some countries allow surrogacy while other countries do not allow freezing reproductive cells or IVF using donated reproductive cells. Some questions remain whether infertility is a disease that should be treated using tax money, who should be allowed to receive treatments, or should same-sex couples have children.¹⁶ These questions are answered in the Act on Assisted Fertility Treatments (1237/2006) in Finland.¹⁷

Finland signed the Act on Assisted Fertility Treatments (1237/2006) on 22.12.2006, and it came into force on 1.9.2007. Deciders thought that a separate law was needed as the process of assisted reproduction affected so many parties, namely the child, the mother, the partner of the mother, and the possible donor of sperm or an egg cell. The central focus was to secure the interests of a child who would be born through assisted fertilization.¹⁸

The Act states that donated reproductive cells can be used for assisted reproduction, surrogacy is not allowed, the parties agreeing to assisted reproductive treatments must give written agreement, and a doctor will have to give consent for the operation. The Act does not state specific age restriction, but limits age based on if it would be dangerous for the mother or child to undergo treatment based on age or health reasons. Additionally, treatments will not be given if there is a risk that the woman receiving treatment cannot provide the child with a balanced life. However, this does not require a separate examination, but a doctor's professional opinion is sufficient. A child born through assisted reproductive technology would have the right to know their biological parent's identity once the child turns 18 years. Until 2019, female couples and single women could not receive assisted reproductive treatments in the public sector.¹⁹

¹⁴ Silverio, M. M., Hemminki, E. (1999) Practice of in-vitro fertilization: A case study from Finland. *Social Science & Medicine*, 42(7), 975.

¹⁵ Annual report of the hospital district of southwest Finland 2007.

¹⁶ Tulppala, M. (2012). Lapsettomuus ja parisuhde. *Lääkärilehti* 26-31, 2081-2086.

¹⁷ *Supra nota* 4

¹⁸ Tiitinen, A. (2006) Hedelmöityshoitolaki eduskunnan käsittelyyn, *Lääkärilehti* 9, 935-936.

¹⁹ *Supra nota* 3

1.2. IVF in the United States of America

In the USA, about eleven percent of women are infertile, and around a third of the cases that include difficulties getting pregnant are due to the man being infertile.²⁰ Around 1 to 2 percent of births in the USA are through IVF.²¹ The USA lacks clear regulations regarding reproductive technologies, and therefore, clinics can create their policies and standards to some extent.²² The American Society of Reproductive medicine has, however, set guidelines for medical centers.²³ The statutes and rules on the assisted reproductive technology regulatory structure do not directly regulate the practice of ART, but instead focuses on public health and the prevention of infectious diseases from spreading.²⁴

The tenth amendment of the Constitution of United States establishes that laws affecting family relations are among the powers left to the State and the people, despite this, there is one federal act regulating infertility in the United States cited as the Access to Infertility Treatment and Care Act.²⁵ The Bill establishes infertility as a medical disease affecting people with multiple health complications that should be covered by health insurance. The Bill established that all citizens should have the ability to have a family and the right should not be denied from anyone based on the lack of insurance coverage.²⁶

In addition to the Access to Infertility Treatment and Care Act there are multiple State level bills. Similarly to the Access to Infertility Treatment and Care Act, the state level bills approach infertility treatment laws from the angle of health care insurance coverage.²⁷ Unfortunately, most of the bills leave in vitro fertilization out of the assisted fertility treatments that are covered.²⁸ Some states, such as California and Nebraska, have taken steps to include IVF as a mandatory procedure to be covered by health care insurance. California has drafted Assembly Bill 767, amending Health care coverage: essential health benefits: infertility, to include in vitro

²⁰ *Infertility*, Office on Women's Health. Retrieved from <https://www.womenshealth.gov/a-z-topics/infertility>, 25 September 2019.

²¹ Assisted Reproductive Technology National Summary Report 2016

²² *Supra nota* 4.

²³ *Ibid.*

²⁴ *Ibid.*

²⁵ Access to Infertility Treatment and Care Act - H.R.2803

²⁶ *Ibid.*, section 3

²⁷ Frith, L. Blyth, E. (2014) Assisted reproductive technology in the USA: is more regulation needed? *Reproductive BioMedicine Online*, 29, 516-523.

²⁸ Knox-Keene Health Care Service Plan Act 1975.

fertilization. However, this bill has not yet been signed.²⁹ Similarly, Nebraska has drafted LB501, which would include IVF in insurance coverage, but the bill has not yet been signed.³⁰

There are two third rail issues that have prevented IVF from being legislated: abortion and the creation of embryos. These are two of the most argued issues in the United States of America. Third rail issues are defined in Merriam-Webster as “a controversial issue usually avoided by politicians”.³¹ The use of funds for the creation of human embryos for research purposes or destruction of human embryos for research is prohibited by the Dickey-Wicker amendment.³² The anti-abortion forces prevented federal agencies from making any policies regarding embryo research in 1980s.³³ The lack of regulation on the procedure of IVF is replaced with requirements from the federal government to have laboratories using IVF technology to be certified by organizations such as the American College of Pathologists and the requirement of reporting data to the Centers for Disease Control and Prevention.³⁴ There are no government organizations regulating issues such as what medical information or updates donors must supply, what test may be conducted on embryos, how old a donor can be, how many eggs may be placed in a woman or how many live births a donor can have.³⁵

The above-mentioned issues have created the myth of un-regulation. Marcy Darnovsky, the executive director of the Center for Genetics and Society, has been quoted saying “The United States is the Wild West of the fertility industry”.³⁶ To counter this, Sean Tipton, the chief lobbyist of American Society for Reproductive Medicine has stated that “Reproductive medicine is one of the most heavily regulated fields of medicine in the U.S.”.³⁷ What Tipton means by this is that all aspects of the IVF procedure are regulated individually. For example, all drugs and medical devices are regulated by the federal government, including reproductive tissues. States

²⁹ Assembly Bill 767, 2019

³⁰Require insurance coverage for in vitro fertilization procedures, 2019.

³¹ Third rail. In *Merriam-Webster's online dictionary*. Retrieved from <https://www.merriam-webster.com/dictionary/third%20rail>, 30 December 2019.

³² Dickey-Wicker Amendment 1996

³³ Dratver, M. B. (2017, February 16) Comparative Study of IVF Policy and Practice in the United States and Israel. [Blog post]. Retrieved from <http://yalescientific.org/thescope/2017/02/comparative-study-of-ivf-policy-and-practice-in-the-united-states-and-israel/>, 12 January 2019.

³⁴ Ibid.

³⁵ Ibid.

³⁶ Ollove, M. (2015) *States Not Eager to Regulate Fertility Industry*. Retrieved from <https://www.pewtrusts.org/en/research-and-analysis/blogs/stateline/2015/3/18/states-not-eager-to-regulate-fertility-industry>, 29 December 2019.

³⁷ Ibid.

must license practitioners and medical professionals and professionals self-regulate broadly.³⁸ However, without laws on assisted reproduction treatments, it seems like the area of medicine is not regulated enough. A separate legislation on assisted reproduction would facilitate the process of assisted reproduction treatments and all aspects related to it.

³⁸ Ibid.

2. HUMAN RIGHTS

The Second World War is seen as a turning point in the forming of efficient rights protection.³⁹ As a result of the Second World War, the United Nations was established in 1945, with the aim of preventing wars from occurring again. In 1948 the United Nations General Assembly adopted the Universal Declaration of Human Rights.⁴⁰ The World Leaders wanted to guarantee the brutality of the Second World War could never take place again and decided to create a document guaranteeing the rights of all citizens.⁴¹ The Declaration is not legally binding, but the multiple conventions drafted based on the Declaration are binding for all Member States that have ratified them.⁴² The Universal Declaration of Human Rights, together with the International Covenant on Civil and Political Rights and the International Covenant on Economic, Social and Cultural Rights, form the International Bill of Human Rights.⁴³

The Universal Declaration is seen as an application document for human rights. The Universal Declaration of Human Rights profoundly influences the Covenants on human rights that have later been adopted. The most central documents that have subsequently been adopted are the International Covenant on Civil and Political Rights and the International Covenant on Economic, Social and Cultural Rights.⁴⁴ Finland ratified both of these documents in 1975.⁴⁵ The United States of America has not ratified the International Covenant on Economic, Social and Cultural Rights, but ratified the International Covenant on Civil and Political Rights in 1992, twenty-six years after the United Nations General Assembly adopted it.⁴⁶

³⁹ Leino, P. (2002) A European Approach to Human Rights? Universality Explored. *Nordic Journal of International Law* 71(4), 472

⁴⁰ Woodiwiss, A. (2005) *Human Rights*. Abingdon: Routledge.

⁴¹ *History of the Document*. United Nations. Retrieved from <https://www.un.org/en/sections/universal-declaration/history-document/index.html>. 15 December 2019.

⁴² Ranta, H. (2006). Ihmisoikeudet ja Terveys. *Duodecim* 122(9), 1005.

⁴³ *Fact Sheet no.2 (Rev.1)*. The International Bill of Human Rights. Retrieved from: <https://www.ohchr.org/Documents/Publications/FactSheet2Rev.1en.pdf>, 15 December 2019

⁴⁴ Smith, R.K.M (2013) *Textbook on International Human Rights*. 6th ed. Oxford University Press.

⁴⁵ Ihmisoikeuskeskus.com (2014). Mitä ihmisoikeudet ovat? In: *Ihmioikeuskasvatus ja -koulutus Suomessa* (10-16).

⁴⁶ Ash, K. (2005). U.S. Reservations to the International Covenant on Civil and Political Rights: Credibility Maximization and Global Influence, *Journal of International Human Rights*, 3(1), Article 7.

Definitions of reproductive rights started emerging in the 1960s as a part of human rights. The first definitions of sexual rights were created in the 1990s. The definitions of reproductive rights mainly included family planning and treatment for sexually transmitted diseases. The definitions of sexual rights included that each individual has the right to consciously and responsibly decide on matters concerning their personal life, such as getting committed in a relationship, getting married, having children, and using contraceptive methods.⁴⁷ The UDHR⁴⁸, ICCPR⁴⁹, ICESCR⁵⁰, and ECHR⁵¹ all have an article that guarantees the right to a family. The ICESCR additionally guarantees a right to health⁵², which is relevant as IVF is a healthcare procedure. The right to a family that is guaranteed by these articles should, therefore, include the right for infertile citizens to found a family through assisted reproduction.

The Constitution of the United States (1787) and the Bill of Rights protect human rights in the USA. The U.S. Supreme Court has also identified fundamental rights that are not in the Constitution. Most of the rights in the Constitution are comparable to the rights set out in the Universal Declaration of Human Rights.⁵³ The Constitution of the United States defines the key instruments of government and their jurisdictions and the basic human rights of citizens. The Bill of Rights is essentially the first ten amendments to the Constitution. The tenth amendment defines the balance of powers between the federal government and the states. According to the tenth amendment, the federal government has only those powers granted by the Constitution. Other powers remain with the States and the people. Although the amendment does not specify these powers, the Supreme Court of United States has ruled that laws affecting family relations are among the powers left to the States and people.⁵⁴

⁴⁷ Klemetti, R., Raussi-Lehto, E. (2016) *Edistä, ehkäise, vaikuta – Seksuaali- ja lisääntymisterveysten toimintaohjelma 2014-2020*. Retrieved from https://www.julkari.fi/bitstream/handle/10024/116162/THL_OPAS33_VERKKO9.3.2016.pdf?sequence=3, 15 December 2019.

⁴⁸ §16 UDHR

⁴⁹ §23 ICCPR

⁵⁰ §10 ICESCR

⁵¹ §8 ECHR

⁵² §12 ICESCR

⁵³ *Human Rights & the U.S.* The Advocates for Human Rights. Retrieved from https://www.theadvocatesforhumanrights.org/human_rights_and_the_united_states, 29 December 2019.

⁵⁴ Lawson, G., Schapiro, R. *The Tenth Amendment*. Retrieved from <https://constitutioncenter.org/interactive-constitution/interpretation/amendment-x/interps/129>, 16 December 2019.

2.1. International Bill of Human Rights

The International Bill of Human Rights consists of the Universal Declaration of Human Rights, the International Covenant on Civil and Political Rights, with its two Optional Protocols, and the International Covenant on Economic, Social and Cultural Rights.⁵⁵

When the United Nations started drafting the Universal Declaration of Human Rights the drafting committee had one representative from each; Australia, Chile, China, France, Lebanon, the Union of Soviet Socialist Republics, the United Kingdom and the United States of America. These representatives had one goal: to draft a document guaranteeing respect for fundamental rights and freedoms. One of these rights was the right to a family.⁵⁶

The Universal Declaration of Human Rights (UDHR) that was adopted by the United Nations General Assembly on 10 December 1948, has the right to a family in Article 16. Section 1 of Article 16, states that “men and women of full age, without any limitation due to race, nationality or religion, have the right to marry and found a family.”⁵⁷

The International Covenant on Civil and Political Rights (ICCPR) came into force on 23 March 1976. The ICCPR aims to improve the civil and political rights of individuals. Finland and the United States of America have both ratified the ICCPR and are therefore bound by it.⁵⁸ Article 23 guarantees the right to family life. Article 23 of ICCPR states that:

1. The family is the natural and fundamental group unit of society and is entitled to protection by society and the State.
2. The right of men and women of marriageable age to marry and to found a family shall be recognized.

The Articles in UDHR and ICCPR state specifically that all men and women have the right to conceive children if they wish to. As assisted reproduction is the only way for infertile couples to

⁵⁵ *Supra nota* 43.

⁵⁶ UN. Department of Public Information. (1998) *The Universal Declaration of Human Rights: a Magna Carta for all humanity*. Retrieved from <https://digitallibrary.un.org/record/251797?ln=en>, 26 November 2019.

⁵⁷ Universal Declaration of Human Rights 1948

⁵⁸ *FAQ: The Covenant on Civil & Political Rights (ICCPR)*. American Civil Liberties Union, Retrieved from <https://www.aclu.org/other/faq-covenant-civil-political-rights-iccpr>, 26 November 2019

have biological children, in vitro fertilization must be accessible to all citizens of ratifying parties.

The International Covenant on Economic, Social and Cultural rights has been ratified by Finland⁵⁹, but not by the United States of America.⁶⁰ ICESCR came into force on 3 January 1976. Initially the ICESCR and the ICCPR were one document, but the United Nations General Assembly decided that they should be divided into two separate Covenants.⁶¹ The aim of ICESCR is to guarantee economic, social and cultural rights, such as the right to health.⁶² Article 12 of ICESCR states that all citizens have the right to enjoy the “highest attainable standard of physical and mental health”.⁶³ Section 2(d) of Article 12 states that: “the creation of conditions which would assure to all medical service and medical attention in the event of sickness” should be made available by all State Parties that have ratified the Covenant.⁶⁴ Infertility can be caused by multiple reasons starting from age, way of life, namely obesity and use of psychoactive substances, but can also be caused by serious health conditions such as cancer.⁶⁵ Despite the reason behind infertility, it is classified as a disease comparable to an event of sickness.⁶⁶ Therefore, anyone suffering from infertility in the countries that have ratified this Covenant should be allowed medical services and medical attention. For this reason it would be necessary for the United States to ratify the ICESCR, to guarantee access to health services and medical attention for all citizens suffering from infertility.

2.2. European Convention on Human Rights

The European Convention on Human Rights (ECHR) is an international treaty to protect the rights and freedoms of individuals. The Convention came into force in 1953.⁶⁷ The Council of

⁵⁹ Ihmisoikeuskeskus.com (2014). *Supra nota* 45.

⁶⁰ Ash, K. (2005). *Supra nota* 41.

⁶¹ Saul, B. et al. (2014) *The International Covenant on Economic, Social and Cultural Rights: Commentary, Cases, and Materials*. Oxford: Oxford University Press.

⁶² International Covenant on Economic, Social and Cultural Rights 1976

⁶³ *Ibid.*

⁶⁴ *Ibid.*

⁶⁵ Brezina, P. R., Zhao, Y. (2012) The Ethical, Legal and Social Issues Impacted by Modern Assisted Reproductive Technologies, *Obstetrics and Gynecology International*, 2012.

⁶⁶ Brugo-Olmedo, S., Chillik, C., Kopelman, S. (2001) Definition and causes of infertility, *Reproductive BioMedicine Online*, 2(1), 173-185.

⁶⁷ Rainey, B., Wicks, E., Ovey, C. (2010) *Jacobs, White, Ovey: The European Convention on Human Rights*. 6th ed. Strasbourg: Oxford University Press.

Europe was founded after the Second World War and similarly to the United Nations General Assembly, the Council of Europe found a need to create a Treaty to secure basic human rights to all citizens of the European Union.⁶⁸ The ECHR is based on the Universal Declaration of Human Rights.⁶⁹ Article 8 is related to IFV as it concerns the right to privacy and family life. Article 8(2) states that:

“There shall be no interference by a public authority with the exercise of this right except such as is in accordance with the law and is necessary in a democratic society in the interests of national security, public safety or the economic well-being of the country, for the prevention of disorder or crime, for the protection of health or morals, or for the protection of the rights and freedoms of others.”

Article 8 does not specifically state that all citizens have the right to found a family, namely have children, but it states that no public authority should have the right to restrict a couple from doing so, unless it poses a risk on the nation. The process of IVF treatments requires multiple public authorities to take part for example in the medical procedure and the use and storage of reproductive tissues among other areas. These authorities may not restrict access to IVF treatments by mandating laws that would be against the process or access to it.

⁶⁸ Greer, S. Williams, A. (2009) Human Rights in the Council of Europe and the EU: Towards 'Individual', 'Constitutional' or 'Institutional' Justice? *European Law Journal*, 15(4), 462-481.

⁶⁹ *What is the European Convention on Human Rights?* Equality and Human Rights Commission. Retrieved from <https://www.equalityhumanrights.com/en/what-european-convention-human-rights>, 30 December 2019.

3. COMPARISONS

3.1. General restrictions on the use of gametes and embryos

Section 4 of the Act on Assisted Fertility Treatments (1237/2007) states that "the following may not be used in assisted fertility treatment: 1) genetically manipulated gametes and embryos, 2) cloned embryos, and 3) gametes and embryos which have been used for research". Research that is not prohibited in the act is listed as procedures that do not jeopardize the natural development of the embryo and observation of embryos that does not jeopardize their natural development. The act restricts the number of gametes used in IVF to five births, after which the donor's gametes may no longer be used in assisted fertility treatment.⁷⁰

A law was signed in 1996 to ban the use of the U.S. Department of Health and Human Services fund for research on the creation of human embryos and research that involved the injury or destruction of human embryos.⁷¹ However, this does not restrict the research of embryos funded in other ways. The Ethics Advisory Board recommended a 14-day limit to the research of human embryos.⁷² The 14-day limit essentially means that an embryo can be used for research purposes for 14 consecutive days after fertilization, after which the embryo must be implanted.⁷³

The United States of America has no regulations on how many live births one donor can have. However, the American Society for Reproductive Medicine has a guideline limiting donors to 25 live births. This guideline is not enforced by law, and no authority is tracking the number of live births per donor. There are known cases where donors have over one hundred genetic children.⁷⁴ Some clinics have set lower limits, such as the Sperm Bank of California limits donations to ten live births.⁷⁵

⁷⁰ *Supra nota* 3, § 4

⁷¹ Committee on Pediatric Research and Committee on Bioethics (2001) Human and Embryo Research. *Pediatrics* 108(3), 813-816.

⁷² (1979) Hew Support of Research Involving Human in Vitro Fertilization and Embryo Transfer, *Biology of Reproduction*, 21(3), 763.

⁷³ Pera, M. F. (2017) Human Embryo Research and the 14-Day Rule. *Development*, 144(11), 1923-1925.

⁷⁴ Cha, A. E. (2018, September 12) 44 donor siblings and counting. *The Washington Post*.

⁷⁵ The Sperm Bank of California Donor Catalog 2014.

Regarding general restrictions on the use of gametes and embryos, the biggest difference between Finland and the United States of America is the limit on how many live births one donor can have. While USA does not have a law regulating the amount, most clinics have set their own limits on how many one donor can have. It is essential that there are limits on the amount of live births for a few reasons. The first reason being that if the amount is not controlled and the babies born through IVF from one donor might stay in the same region, raising the possibility of a chance of accidental incest, especially as USA does not keep a registry of the donors or give information about the donors to the children born in all States.⁷⁶ Whereas, in Finland the service provider who provides the assisted fertility treatment must notify the donation collector when assisted reproduction has resulted in a live birth and the donation collector must notify the donor. The amount of live births per donor is collected and once there are five live births, the remaining gametes of the donor will be destroyed.⁷⁷

3.2. Influencing characteristics of the child

The characteristics of a child can be influenced in multiple ways during the fourth stage of IVF when the embryo is checked for abnormalities. This step is often referred to as the pre-implantation genetic screening or the pre-implantation genetic diagnosis.

The Act on Assisted Fertility Treatments (1237/2006) states in section 5 that the characteristics of a child born as a result of IVF may be influenced through the selection of gametes or embryos only in cases where it is essential for health reasons and for choosing gametes whose donor resembles the parents of the child.⁷⁸ In other words, a child's sex can be influenced if there is a substantial risk of severe disease if the child were to be of the other sex. Examples of serious diseases are fragile-x syndrome and Deschene's muscular dystrophy. Additionally, the characteristics may be influenced during the selection of the donor to ensure resemblance with the parents of the child, including skin, eye and hair color, height, and ethnic background.⁷⁹

⁷⁶ Nelson, M. K., Hertz, R., Kramer, W. (2016) Gamete donor anonymity and limits on numbers of offspring: the views of three stakeholders. *Journal of Law and the Biosciences*. 3(1), 39-67.

⁷⁷ *Supra nota 3*

⁷⁸ *Supra nota 3*, § 5

⁷⁹ Vehmas, S. et al. (2004) Alkio- Ja Sikiödiagnostiikka. *Lääkärin etiikka*, 7, 88-90.

Section 4 of the Act restricts the use of genetically manipulated gametes and embryos, making it illegal to influence characteristics of the child other than those mentioned in article 5.⁸⁰

Influencing the characteristics of a child is common in the United States, namely due to family balancing, which is legal in the United States. Clinics offer sex selection also for medical reasons such as fragile-x syndrome and Deschene's muscular dystrophy. In a study conducted on 464 clinics in the United States, it was found that 42% of the clinics provide sex selection for non-medical reasons.⁸¹

In Finland characteristics of a child can be influenced only for medical reasons and during the selection of a donor in order for the child born to resemble the parents of the child. In the United States some clinics allow sex selection for family planning purposes and other reasons different than medical reasons. There seems to be no justifiable reason why there should be the possibility to choose a baby's sex other than for medical reasons. Allowing sex selection also raises the moral issue of design babies.

3.3. Age limits

The upper age limit for IVF treatment is mostly a moral issue. When an older woman has a child, moral issues are raised, such as older women are not equipped to raise teenage children, and the child will be too young when the mother dies, leaving a young person with not enough financial and emotional support. This is, however, only an issue for women who have a child alone and for couples where both parents are older.⁸²

The Act on Assisted Fertility Treatments (1237/2006) states in section 8(3) that receiving assisted fertility treatment is prohibited if the pregnancy would pose a substantial risk to the health or the well-being of the woman or the child due to the age of the woman.⁸³ For this reason, the upper age limit to receive IVF treatment in the public sector using their own eggs and egg donation is under 40 years.⁸⁴

⁸⁰ *Supra nota* 3, § 5

⁸¹ Capelouto, S. M. et al. (2018). Sex selection for non-medical indications: a survey of current pre-implantation genetic screening practices among U.S. ART clinics. *Journal of assisted reproduction and genetics*, 35(3), 409-416.

⁸² Lotz, M. (2012, October 16) IVF Treatment for Older Women: Is Age the Greatest Concern? *The Conversation*

⁸³ *Supra nota* 3, § 8

⁸⁴ Sainio S, et al. (2010) Yli 40-vuotiaan naisen raskaus. *Suomen Lääkärilehti*, 39, 3129-3134.

There are no laws in the United States on the upper age limit of IVF, but most clinics have set the limit at 42 to 45 years when using the woman's own eggs. Research shows that fertility reduces at age 40, and success rates lower with fertility treatments as the woman gets older. Most IVF clinics in the USA allow women up to the age of 50 to receive IVF treatment using donor eggs.⁸⁵

In Finland men between 20 years old and 45 years old can donate sperm.⁸⁶ Egg donors must be under 36 years old in Finland for unknown donors. If the person receiving treatment is getting an egg cell from a person she knows, then the age limit is 39 years old.⁸⁷ The American Society for Reproductive Medicine has set recommendations that sperm donors must be over the age of 18 years old and under 34 years old. These are however not mandatory, and each sperm bank can set their own limits.⁸⁸ Egg donation age limits in the United States are from 21 years old up to 30 years old. However, most egg donation clinics will not take new clients over the age of 29.⁸⁹

In Finland the law regulates age of the person receiving IVF based on whether a pregnancy would pose a risk to the health of the mother or the child. The USA does not have laws regarding the age limits of women receiving treatment, but most clinics have set age limits. Age limits are important as when older women become pregnant there are multiple risks to health, such as a higher risk to develop gestational diabetes, higher risk of premature birth, higher risk of chromosome abnormalities among multiple other risks.⁹⁰ It should be mandatory that all clinics in the United States of America had reasonable age limits for IVF to guarantee safety of the child and the mother. It is good that egg donors have age limits, as the process is not easy. While sperm donation takes usually less than an hour, egg donors must inject medication for six to eight weeks, visit a fertility doctor multiple times and go under sedation for 15-20 minutes. Especially as Egg donation is an expensive process, it is good to make sure that the egg cells have the best possibility to be fertile.

⁸⁵*Fertility & IVF After Age 40, Older Women & Infertilit*. Advanced Fertility Center of Chicago. Retrieved from <https://www.advancedfertility.com/fertility-after-age-40-ivf.htm>, 26 November 2019.

⁸⁶*Tietoa siemennesteen luovutuksesta*. Väestöliitto. Retrieved from <https://www.vaestoliitto.fi/parisuhde/perhehaaveet/laakarilta/?x4385677=4984301>, 26 November 2019.

⁸⁷*Tietoa munasolun luovutuksesta*. Väestöliitto. Retrieved from <https://www.vaestoliitto.fi/parisuhde/perhehaaveet/?x4396128=4930871>, 26 November 2019.

⁸⁸*Sperm donation*. Mayo Clinic. Retrieved from <https://www.mayoclinic.org/tests-procedures/sperm-donation/about/pac-20395032>, 25 November 2019

⁸⁹*The Donor Source: What is the ideal age for an egg donor?* Fertility SOURCE Companies. Retrieved from <https://www.fertilitysourcecompanies.com/what-is-the-ideal-age-for-an-egg-donor/>, 15 December 2019.

⁹⁰*Getting pregnant*. Mayo Clinic. Retrieved from <https://www.mayoclinic.org/healthy-lifestyle/getting-pregnant/in-depth/pregnancy/art-20045756>, 1 January 2020.

3.4. Surrogacy

Surrogacy is one method of assisted reproduction. It is an arrangement where a woman makes a contract to carry a child for another person who will become the parent of the child after birth. There are multiple reasons why people turn to surrogacy, such as if pregnancy is medically impossible, the risks of pregnancy are too dangerous, among other reasons. Additionally, surrogacy is the only option for male couples and single men to have a biological child. Surrogacy is also the only way for people who are unable to conceive to have a biological child. In the IVF surrogacy procedure, the parent's egg cell and sperm are combined and transferred into the surrogate mother's uterus, meaning that the child will be biologically related to the donors but not the surrogate mother.⁹¹

Surrogacy was made illegal in Finland with the Act on Assisted Fertility Treatments (1237/2006).⁹² Section 8(6) of the Act states that "assisted fertility treatment may not be provided if: there is reason to presume that the child will be given up for adoption." Although this does not directly state that surrogacy itself is illegal, however, as assisted fertility treatment is an essential step in the surrogacy procedure and so is giving the baby to another person than the birth giver; therefore, surrogacy is illegal. Section 34 of the Act states that "a person who intentionally or through gross negligence provides assisted fertility treatment in violation shall be sentenced to a fine or imprisonment of not more than one year for assisted fertility treatment offense".⁹³

In the United States of America legal issues related to Surrogacy fall under state jurisdiction. Almost half of the fifty states in the U.S. have some legislation relating to surrogacy, some states have case law only, while some states do not have any regulations.⁹⁴

Four states ban surrogacy: Indiana, Michigan, New Jersey, and New York. As an example, surrogacy contracts have been prohibited in New York since 1992, after the governor of New York introduced a bill to ban surrogacy in the state. The bill was introduced after the case Baby

⁹¹ Cook, R. Sclater, S. D. (Eds.) (2003) *Surrogate Motherhood: International Perspectives*. London: Bloomsbury Publishing.

⁹² Kanckos, L. (2012) Surrogatmoderskap, altruism och jämlikhet. In: *Barnets bästa i politikens främsta rum*, (200). Åbo: Åbo Akademis förlag

⁹³ Supra nota 3, § 34

⁹⁴ Storrow, R. F. (2015) Surrogacy: American Style. In: P. Gerber, K. O'Byrne (Eds.) *Surrogacy, Law and Human Rights*. Surrey: Ashgate Publishing.

M (1989), which was a custody case, where the surrogate mother decided that she would keep the baby after giving birth.⁹⁵

Fourteen states regulate and permit surrogacy through statutes. However, there is little uniformity with these states. Inconsistencies arise from issues such as remuneration, the presumption of parentage, who can be a surrogate, and who can receive medical assistance for surrogacy. As an example, California allows and regulates full surrogacy contracts only. Remuneration is permitted with no clarifications on reasonableness. In California, there are no restrictions on who can be a surrogate or the intended parent, namely whether the parents have to be married, or where the surrogate or intended parents reside.⁹⁶ Whereas in Maine, the law allows remuneration within reasonableness. There is an age limit of twenty-one years, and they must have gone through a medical examination. Intended parents must also have undergone medical evaluation and mental health consultation. At least one parent must be a resident of Maine.⁹⁷

The remaining thirty-two states do not clearly address surrogacy by legislation nor case law. For example, in Tennessee, surrogacy is defined in law, but neither allows nor prohibits the practice. Tennessee is considered an unfriendly jurisdiction towards surrogacy as it does not allow pre-birth parentage agreements.⁹⁸ Another example is Oregon, which does not have any statutes that directly address surrogacy. Since Oregon permits pre-birth parentage agreements, it is considered a surrogacy friendly jurisdiction.⁹⁹

Surrogacy is the only way for single men and male couples to have biological children. It can also be the only way for women with infertility problems or serious health conditions or safety risks caused by pregnancy to have a biological child. Finland should make surrogacy legal but make remuneration reasonable to prevent human trafficking and wrong use. If surrogacy was legal, it would also prevent medical tourism, which poses multiple risks to multiple parties. Laws would have to be clear and properly enforced, to prevent cases such the Baby M case¹⁰⁰, where the surrogate mother decided she would keep the baby instead of giving it to the biological parents. Other issues that should be considered are that the biological parents must agree to

⁹⁵ In the Matter of Baby M., 109 N.J. 396 (1988)

⁹⁶ California Code, Family Code - FAM § 7962 (2013)

⁹⁷ Maine Parentage Act, Title 19-A, Chapter 61 (2016)

⁹⁸ Tennessee Code Title 36. Domestic Relations § 36-1-102

⁹⁹ Pope, R. E., Brewer, T. (2016). *Gestational Surrogacy in Oregon*. Retrieved from <https://www.creativefamilyconnections.com/us-surrogacy-law-map/oregon/>, 26 November 2019.

¹⁰⁰ *Supra nota* 95

taking the child after birth without exceptions and the question on what to do if the child is found not to be healthy during pregnancy. Who should decide on abortion, and if the surrogate mother does not want to have an abortion and the biological parents do not want to take an unhealthy baby, what should be done. Finland could take example of the laws in Maine.

3.5. Remuneration

Remuneration is banned in Finland based on section 21 of the Act on Assisted Fertility Treatments (1237/2006). The section states that remuneration cannot be given or promised for the donation of gametes. However, the donor may be compensated for expenses, loss of income, and other inconvenience arising from the donation.¹⁰¹ The Ministry of Social Affairs and Health Decree on Assisted Fertility Treatments (825/2007) states that egg donors may receive an additional 250 euros for mental and physical strain and incapability of performing daily tasks after donation.¹⁰²

Egg donors in the United States may receive payment from \$5000-\$10 000. Egg donors who have exceptional qualities or who have had successful fertilizations may be paid more. The prospective parents pay for all expenses incurred as a result of egg donation.¹⁰³ Sperm donors receive anywhere from \$60 per donation to \$1000 per month if three donations are made per week.¹⁰⁴

Remuneration on surrogacy varies from state to state. In California a first-time surrogate can receive a base payment of \$50,000 and additional expenses and allowances. However, the typical average compensation for surrogacy in USA is \$25,000 and additional expenses and allowances for a first-time surrogate.¹⁰⁵

Remuneration on donations and surrogacy need to be reasonable to prevent people using it as a mean for income and to keep a high standard for the quality of gamete. Donation should be

¹⁰¹ *Supra nota* 3, § 21

¹⁰² Sosiaali- ja terveystieteiden ministeriön asetus hedelmöityshoidoista 825/2007

¹⁰³ *Egg Donor Compensation*. Egg Donor America. Retrieved from <https://www.eggdonoramerica.com/become-egg-donor/egg-donor-compensation>, 26 November 2019.

¹⁰⁴ *Sperm Banks USA*, Co-ParentsMatch. Retrieved from <https://www.co-parentmatch.com/sperm-bank-usa.aspx>, 24 November 2019.

¹⁰⁵ Ramskold, L. A., Posner, M. P., (2013) Commercial Surrogacy: how provisions of monetary remuneration and powers of international law can prevent exploitation of gestational surrogates. *Journal of Medical Ethics*, 39(6), 397-402.

based on the will to help rather than the need to receive remuneration. The compensation for donation in USA is very high in all areas. High compensations attract people with need for money, such as addicts and people with other issues considering health. Remuneration on surrogacy should also be reasonable to prevent human trafficking and to emphasize consideration before agreeing to a contract as important as a surrogacy contract.

CONCLUSION

In Finland IVF laws are regulated with the Act on Assisted Fertility Treatments 1237/2006. The Act regulates, among other aspects, what research can be done on embryos, how the characteristics of a child may be influenced, the age limitations for recipients of assisted reproduction treatments and donors as well as remuneration for donor. The Act bans surrogacy, as it is illegal to give a child born through assisted reproduction to adoption.¹⁰⁶

The United States do not directly regulate assisted fertility treatments on a federal level, other than some provisions where assisted reproduction treatments are included in the insurance coverage. Some states have drafted Bills to add IVF into their insurance coverage, but none of those Bills have been signed yet. In the United States clinics have set own policies and standards for IVF treatments ranging from total bans to full availability of treatments. The amount on regulation in the United States of America can be viewed from two points of view: there is no specific regulation that displays laws on assisted fertility treatments. On the other hand, all aspects of IVF are regulated separately, for example with regulation on drugs and medical devices, including tissues. However, the separate regulations on single provisions of assisted reproduction do not guarantee the right to found a family for people suffering from infertility.

The International Bill on Human Rights, which consists of the Universal Declaration of Human Rights, the International Covenant on Civil and Political Rights, with its two Optional Protocols and the International Covenant on Economic, Social and Cultural Right, grants all citizens of ratifying parties the right to found a family and the right to health. Finland has ratified both Covenants and is therefore bound by them, but the US has only ratified the ICCPR. The US has signed the ICESCR, but has not ratified it. By ratifying the Covenant, the US would also be bound by it and would have to guarantee all citizens right to health, which includes health services for infertility. The European Convention on Human Rights also governs human rights in the European Union. As a Member State of EU Finland is bound by the Convention. The Constitution of United States together with The Bill of Rights govern human rights in the United States.

¹⁰⁶ *Supra nota 3*

The comparison found most differences in the laws of Finland compared to policies and standards of most States in the USA, in that while Finland has specific regulation on how many live births one donor may have, in the United States there were vast variations between clinics, where in some there were no limitations on amount of live birth to some clinics having a limit at ten live births per donor. Most clinics in the United States allow sex selection for medical and non-medical reasons, such as family planning, where a family would rather have a child of one sex rather than the other. In Finland influencing the characteristics of a child were strictly limited to medical reasons only, if the child would have a risk of being severely ill if they were to be one sex rather than the other. Additionally, in Finland characteristics may be influenced during the selection of the donor to ensure resemblance of the child with the prospective parents. Both countries show patterns of age limits for receiving IVF treatment and for donors. In Finland the law restricts giving IVF treatments for women for whom pregnancy could cause health complications. In the United States clinics have also set age limits for the same reasons, as well as to have higher possibilities of pregnancy after treatment as age affects the chances of becoming pregnant. Both countries also had limits on the age of donors. Surrogacy is banned in Finland, as the law bans adoption of a child born through assisted reproduction technologies. Most States in the USA do not address surrogacy or allow it. States that do not address surrogacy law, but allow pre-birth parentage agreements are viewed as surrogacy friendly states, while states that do not allow pre-birth parentage agreements are viewed as unfriendly jurisdiction towards surrogacy. The Finnish law set specific limits on remuneration for donation of reproductive tissues in the Act on Assisted Reproduction Treatments 1237/2006. In the United States remuneration for donation of reproductive tissue and surrogacy vary largely from state to state, when in some States remuneration must be reasonable, as in other States remuneration must be within reasonableness.

There is a clear lack of regulation in the United States of America, where domestic laws should be modified to comply with the international standards. A way to fix this is with a Directive, which would set a goal that all states need to achieve but would leave the option of how to achieve them to the states. The United States could take example of the Directives in EU, such as Directive 2004/23/EC of the European Parliament and of the Council of 31 March 2004 on setting standards of quality and safety for the donation, procurement, testing, processing,

preservation, storage and distribution of human tissues and cells.¹⁰⁷ Additionally, the USA should ratify ICESCR to guarantee right to health care for all citizens. The Act on assisted reproduction treatments 1237/2006 in Finland could be used as an example on specific laws for states. The positive side of the U.S. law is that surrogacy is allowed, guaranteeing that all citizens with sufficient funds may conceive a biological child, regardless of infertility. Finland could take example of the surrogacy laws in Maine to create a law on surrogacy, focusing on issues such as reasonable surrogacy and safety of the mother and child. It would also be important to look at case examples from the U.S. to see what should be payed attention to, such as preventing a issues as in the Baby M case from taking place.

As most states leave in vitro treatments out of the mandatory treatments that should be covered by insurance, it takes away the possibility for some people to found a family for financial reasons. This removes the right to family from people with lower life qualities, amounting to a breach of human rights. The United Nation should take steps to ensure that the U.S. follow the conventions guaranteeing human rights and makes the ability to found a family possible for infertile people also.

¹⁰⁷ OJ L 102, 7.4.2004, p. 48.

LIST OF REFERENCES

Books

1. Bonnicksen, A. L. (1991) *In Vitro Fertilization – Building Policy from Laboratories to Legislatures*. New York: Columbia University Press.
2. Cook, R. Sclater, S. D. (Eds.) (2003) *Surrogate Motherhood: International Perspectives*. London: Bloomsbury Publishing.
3. Rainey, B., Wicks, E., Ovey, C. (2010) *Jacobs, White, Ovey: The European Convention on Human Rights*. 6th ed. Strasbourg: Oxford University Press.
4. Saul, Ben, et al. (2014) *The International Covenant on Economic, Social and Cultural Rights: Commentary, Cases, and Materials*. Oxford: Oxford University Press.
5. Smith, R.K.M (2013) *Textbook on International Human Rights*. 6th ed. Oxford University Press.
6. Söderlund, D. (1988). *Inseminatio, in vitro fertilisaatio ja alkio: Vertaileva selvitys*. Helsinki: Valtion painatuskeskus.
7. Woodiwiss, A. (2005) *Human Rights*. Abingdon: Routledge.

Articles

8. Ash, K. (2005). U.S. Reservations to the International Covenant on Civil and Political Rights: Credibility Maximization and Global Influence, *Journal of International Human Rights*, 3(1), Article 7.
9. Brugo-Olmedo, S., Chillik, C., Kopelman, S. (2001) Definition and causes of infertility, *Reproductive BioMedicine Online*, 2(1), 173-185.
10. Brezina, P. R., Zhao, Y. (2012) The Ethical, Legal and Social Issues Impacted by Modern Assisted Reproductive Technologies, *Obstetrics and Gynecology International*, 2012.
11. Capelouto, S. M. et al. (2018). Sex selection for non-medical indications: a survey of current pre-implantation genetic screening practices among U.S. ART clinics. *Journal of assisted reproduction and genetics*, 35(3), 409-416.
12. Frith, L. Blyth, E. (2014) Assisted reproductive technology in the USA: is more regulation needed? *Reproductive BioMedicine Online*, 29, 516-523.
13. Greer, S. Williams, A. (2009) Human Rights in the Council of Europe and the EU: Towards 'Individual', 'Constitutional' or 'Institutional' Justice? *European Law Journal*, 15(4), 462-481.
14. (1979) Hew Support of Research Involving Human in Vitro Fertilization and Embryo Transfer, *Biology of Reproduction*, 21(3).

15. Kaartinen, N., Tinkanen, H. (2017). Syntykö koeputkihedelmöityshoidolla terveitä lapsia? *Duodecim* 8, 728-734.
16. Kanckos, L. (2012) Surrogatmoderskap, altruism och jämlikhet. In: *Barnets bästa i politikens främsta rum*, (200). Åbo : Åbo Akademis förlag
17. Nelson, M. K., Hertz, R., Kramer, W. (2016) Gamete donor anonymity and limits on numbers of offspring: the views of three stakeholders. *Journal of Law and the Biosciences*. 3(1), 39-67.
18. Nsien, I. E. (2017) Navigating the Federal Regulatory Structure of Assisted Reproduction Technology Clinics. *American Bar Association Health eSource*, 14(3).
19. Ramskold, L. A., Posner, M. P., (2013) Commercial Surrogacy: how provisions of monetary remuneration and powers of international law can prevent exploitation of gestational surrogates. *Journal of Medical Ethics*, 39(6), 397-402.
20. Ranta, H. (2006). Ihmisoikeudet ja Terveys. *Duodecim* 122(9).
21. Sainio S, et al. (2010) Yli 40-vuotiaan naisen raskaus. *Suomen Lääkärilehti*, 39, 3129-3134.
22. Silverio, M. M., Hemminki, E. (1999) Practice of in-vitro fertilization: A case study from Finland. *Social Science & Medicine*, 42(7).
23. Storrow, R. F. (2015) Surrogacy: American Style. In: P. Gerber, K. O'Byrne (Eds.) *Surrogacy, Law and Human Rights*. Surrey: Ashgate Publishing.
24. Tiitinen, A. (2006) Hedelmöityshoitolaki eduskunnan käsittelyyn, *Lääkärilehti* 9, 935-936.
25. Tiitinen, A., Hovatta, O. (2004). Lapsettomuus. In: O. Ylikorkala, A. Kauppila (Eds.), *Naistentaudit ja synnytykset* (189) Keuruu: Kustannus Oy Duodecim.
26. Tulppala, M. (2002). Lapsettomuuden tuska. *Duodecim* 118, 531-536.
27. Tulppala, M. (2012). Lapsettomuus ja parisuhde. *Lääkärilehti* 26-31, 2081-2086.
28. Leino, P. (2002). A European Approach to Human Rights? Universality Explored. *Nordic Journal of International Law*, 71(4).
29. Vehmas, S. et al. (2004) Alkio- Ja Sikiödiagnostiikka. *Lääkärin etiikka*, 7, 88-90.

EU and international legislation

30. European Convention of Human Rights
31. International Covenant on Economic, Social and Cultural Rights 1976
32. International Covenant on Civil and Political Rights
33. Universal Declaration of Human Rights 1948

Other countries' legislation

34. Access to Infertility Treatment and Care Act - H.R.2803.
35. Assembly Bill 767, 2019

36. California Code, Family Code 2013
37. Dickey-Wicker Amendment 1996
38. Knox-Keene Health Care Service Plan Act 1975.
39. Laki hedelmöityshoidoista 1237/2006
40. Maine Parentage Act 2016
41. Require insurance coverage for in vitro fertilization procedures, 2019.
42. Sosiaali- ja terveystieteiden ministeriön asetus hedelmöityshoidoista 825/2007
43. Tennessee Code Title 36. Domestic Relations § 36-1-102
44. the Bill of Rights
45. The Constitution of the United States 1787
46. Uniform Parentage Act 2002

Other Sources

47. *5 Steps of the in Vitro Fertilization (IVF) Process*. Piedmont Healthcare. Retrieved from [www.piedmont.org/living-better/5-steps-of-the-in-vitro-fertilization-\(ivf\)-process](http://www.piedmont.org/living-better/5-steps-of-the-in-vitro-fertilization-(ivf)-process).
48. Assisted Reproductive Technology National Summary Report 2016
49. Ball, P. (2018 July 8). Seven ways IVF changed the world – from Louise Brown to stem-cell research, *The Guardian*.
50. Cha, A. E. (2018, September 12) 44 donor siblings and counting. *The Washington Post*.
51. Committee on Pediatric Research and Committee on Bioethics (2001) Human and Embryo Research. *Pediatrics* 108(3), 813-816.
52. Dratver, M. B. (2017, February 16) Comparative Study of IVF Policy and Practice in the United States and Israel. [Blog post]. Retrieved from <http://yalescientific.org/thescope/2017/02/comparative-study-of-ivf-policy-and-practice-in-the-united-states-and-israel/>, 12 January 2019.
53. *Egg Donor Compensation*. Egg Donor America. Retrieved from <https://www.eggdonoramerica.com/become-egg-donor/egg-donor-compensation>, 26 November 2019.
54. *Fact Sheet no.2 (Rev.1)*. The International Bill of Human Rights. Retrieved from: <https://www.ohchr.org/Documents/Publications/FactSheet2Rev.1en.pdf>, 15 December 2019
55. *FAQ: The Covenant on Civil & Political Rights (ICCPR)*. American Civil Liberties Union, Retrieved from <https://www.aclu.org/other/faq-covenant-civil-political-rights-iccpr>, 26 November 2019
56. *Fertility & IVF After Age 40, Older Women & Infertilit*. Advanced Fertility Center of Chicago. Retrieved from <https://www.advancedfertility.com/fertility-after-age-40-ivf.htm>, 26 November 2019.

57. *Getting pregnant*. Mayo Clinic. Retrieved from <https://www.mayoclinic.org/healthy-lifestyle/getting-pregnant/in-depth/pregnancy/art-20045756>, 1 January 2020.
58. *History of the Document*. United Nations. Retrieved from <https://www.un.org/en/sections/universal-declaration/history-document/index.html>. 15 December 2019.
59. *Human Rights & the U.S.* The Advocates for Human Rights. Retrieved from https://www.theadvocatesforhumanrights.org/human_rights_and_the_united_states, 29 December 2019.
60. Ihmisoikeuskeskus.com (2014). Mitä ihmisoikeudet ovat? In: *Ihmioikeuskasvatus ja- koulutus Suomessa* (10-16).
61. *Infertility*, Office on Women's Health. Retrieved from <https://www.womenshealth.gov/a-z-topics/infertility>, 25 September 2019.
62. In the Matter of Baby M., 109 N.J. 396 (1988)
63. *IVF Egg Donation Law and Legislation in USA*. EggDonationFriends.com. Retrieved from www.eggdonationfriends.com/country-month-usa/rules-regulations-usa/
64. Klemetti, R. (2016). *Sexual and Reproductive Rights, health and services in Finland*. Retrieved from <https://www.slideshare.net/THL.fi/sexual-and-reproductive-rights-health-and-services-in-finland>
65. Klemetti, R., Raussi-Lehto, E. (2016) *Edistä, ehkäise, vaikuta – Seksuaali- ja lisääntymisterveyden toimintaohjelma 2014-2020*. Retrieved from https://www.julkari.fi/bitstream/handle/10024/116162/THL_OPAS33_VERKKO9.3.2016.pdf?sequence=3, 15 December 2019.
66. Lawson, G., Schapiro, R. *The Tenth Amendment*. Retrieved from <https://constitutioncenter.org/interactive-constitution/interpretation/amendment-x/interps/129>, 16 December 2019.
67. Lotz, M. (2012, October 16) IVF Treatment for Older Women: Is Age the Greatest Concern? *The Conversation*
68. Ollove, M. (2015) *States Not Eager to Regulate Fertility Industry*. Retrieved from <https://www.pewtrusts.org/en/research-and-analysis/blogs/stateline/2015/3/18/states-not-eager-to-regulate-fertility-industry>, 29 December 2019.
69. Pera, M. F. (2017) Human Embryo Research and the 14-Day Rule. *Development*, 144(11), 1923-1925.
70. Pope, R. E., Brewer, T. (2016). *Gestational Surrogacy in Oregon*. Retrieved from <https://www.creativefamilyconnections.com/us-surrogacy-law-map/oregon/>, 26 November 2019.
71. *Sperm Banks USA*, Co-ParentsMatch. Retrieved from <https://www.co-parentmatch.com/sperm-bank-usa.aspx>, 24 November 2019.
72. *Sperm donation*. Mayo Clinic. Retrieved from <https://www.mayoclinic.org/tests-procedures/sperm-donation/about/pac-20395032>, 25 November 2019.

73. *The Donor Source: What is the ideal age for an egg donor?* Fertility SOURCE Companies. Retrieved from <https://www.fertilitysourcecompanies.com/what-is-the-ideal-age-for-an-egg-donor/>, 15 December 2019.
74. The Sperm Bank of California Donor Catalog 2014.
75. Third rail. In *Merriam-Webster's online dictionary*. Retrieved from <https://www.merriam-webster.com/dictionary/third%20rail>, 30 December 2019.
76. *Tietoa munasolun luovutuksesta*. Väestöliitto. Retrieved from <https://www.vaestoliitto.fi/parisuhde/perhehaaveet/?x4396128=4930871>, 26 November 2019.
77. *Tietoa siemennesteen luovutuksesta*. Väestöliitto. Retrieved from <https://www.vaestoliitto.fi/parisuhde/perhehaaveet/laakarilta/?x4385677=4984301>, 26 November 2019.
78. UN. Department of Public Information. (1998) *The Universal Declaration of Human Rights: a Magna Carta for all humanity*. Retrieved from <https://digitallibrary.un.org/record/251797?ln=en>, 26.11.2019.
79. Varsinais-Suomen sairaanhoitopiirin vuosikatsaus 2007.
80. *What is the European Convention on Human Rights?* Equality and Human Rights Commission. Retrieved from <https://www.equalityhumanrights.com/en/what-european-convention-human-rights>, 30 December 2019.

Non-exclusive Licence for Publication and Reproduction of Graduation

I Sanni Savonen (30.05.1995)

1. grant Tallinn University of Technology free licence (non-exclusive licence) for my thesis

Comparative Analysis of Legislation in Finland and the United States of America Regarding In Vitro Fertilization.

supervised by Jenna Uusitalo.

to be

1.1. reproduced for the purposes of preservation and electronic publication, incl. to be entered in the digital collection of TUT library until expiry of the term of copyright;

1.2. published via the web of Tallinn University of Technology, incl. to be entered in the digital collection of TUT library until expiry of the term of copyright.

2. I am aware that the author also retains the rights specified in clause 1.

3. I confirm that granting the non-exclusive licence does not infringe third persons' intellectual property rights, the rights arising from the Personal Data Protection Act or rights arising from other legislation.

03.01.202

