POSTMORTAL AND POSTHUMOUS REPRODUCTION: ETHICAL AND LEGAL APPROACHES TO THE LEGALIZATION

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ABSTRACT

The analysis of ethical and legal approaches to the legalization of postmortal and posthumous reproduction has been carried out in the article on the basis of the analysis of domestic legislation, international documents, international experience, data of sociological surveys, analytical materials, scientific achievements of domestic and foreign scholars. It has been established that the legal regulation of legal relations in the field of implementing the postmortal reproduction programs in some countries is imperfect, and in most countries it is absent at all. There is a variety of ethical approaches to the introduction of posthumous and postmortal reproduction.

It has been proved that there is an identification of the concepts of "posthumous reproduction" and "postmortal reproduction". The criteria of such differentiation have been offered: child's birth term; a genetic relationship with parents and informed consent to reproduction, as well as paternity records; use of assisted reproductive technology or posthumous insemination; passing the obligatory legislative procedure of establishing paternity (maternity) or guardianship after the birth of a child; settling the issue of the ownership of gametes or embryos and terms, rules of storage, use, destruction of genetic material of the recipient; settling property rights of a child born in such a way.

The content of the terms of "posthumous" and "post mortal" reproduction has been determined and their author's definition has been formulated. The functions of reproductions have been singled out. It has been established that legal relations in the researched sphere have a number of civil characteristic features. Propositions for improving the legislation regulating posthumous reproduction have been developed and directions for improving the legislation on legalization of post mortal reproduction have been defined.

Keywords: Assisted Reproductive Technology, Right to Life, Postmortal Reproduction, Posthumous Reproduction, Right to Informed Consent, Property Rights, Legal Status

INTRODUCTION

The rapid development of innovations in the field of reproductive medicine has made it possible to freeze and store genetic material for many years, and thus, there is a possibility of having a child after the death of one or both parents (Rothman, 1980). Such a birth, when the use of posthumous insemination can assist in transplantation of embryos after the death of one or two genetic parents, is called "postmortal reproduction" (Filimonova, 2015). There are currently cases of taking male gametes, even within 24-36 hours after the fact of death (Allamyarova, Sanakoeva & Garaeva, 2018).

At the same time, it should be noted that the attitude to "postmortal reproduction" in society, in contrast to other types of assisted reproductive technologies, is ambiguous. Thus,

some scholars believe that postmortal reproduction should not be implemented, since its implementation violates the "right of a child to live and be raised in a full family" (Krasnova & Alekseeva, 2016); other scholars argue that information about the birth of a child in such a way will lead to a child's mental disorder (Svitnev, 2011); the recognition of inheritance rights for "non-existent subjects" according to some scholars can lead to the collapse of law and the destruction of the structure of inheritance law, since property rights should be only for existing subjects (Shishka, 2011). Proponents of a child's birth due to the application of postmortal reproduction belive that this method of birth is quite appropriate, they refute the arguments of opponents and emphasize the expediency of focusing on the issues of legal regulation of legal relations arising in connection with the birth of a child in such a way (Rubets, 2011) First of all, we talk about the legal status of a child born with the help of the postmortal reproduction program, a child's property rights, determining the legal status of genetic material, etc.

We also emphasize that the use of postmortal reproduction is practically not regulated both in Ukraine and in other countries starting with the legalization of such reproduction programs, the procedure for registration of "postmortal" children born after the death of onr or both parents, etc. Moreover, this practice is prohibited in Germany, Italy, Sweden, Switzerland, France (Gesetz zum Schutz von Embryonen, 1990).

Thus, there is a need to study the legitimacy of postmortal reproduction, given the possibilities of scientific achievements in the field of assisted reproductive technology, in particular the development of postmortal reproduction, the need to give birth to children in such a way, ethical considerations about the feasibility of postmortal reproduction. In this regard, we believe that the chosen area of research is relevant.

Medical innovations in the field of reproductive medicine currently allow accomplishing several options for posthumous reproduction. It is the removal of sperm from a man who died within 24-36 hours and its preservation, the use of cryopreserved sperm or an egg obtained during a person's lifetime, transfer to a previously frozen embryo. It should be noted that the problem of collecting genetic material is mainly considered in the context of the problems of transplantation and donation, but we must admit that these are different areas both in ethical and legal aspects and in practice in general. Examples of using such a method of assisted reproductive technology (hereinafter – ART), which tend to increase, give rise to scientific and social discourses on the feasibility of legitimizing postmortal reproduction.

The need for legal regulation of using ART was actively discussed by the experts after the plane crash in Chile in 1983, where an American couple – Mario and Elsa Rios died. The Rios participated in the ART program in Melbourne, Australia. As a result of treatment, one of the embryos was implanted to Ms. Rios, but she was unable to have a child. The embryos created during the program were not used because the couple left them at an Australian clinic for storage without any order in case of the couple's death. Lawyers, physicians, church representatives after the plane crash expressed different views on the legal status of embryos and their future. The Australian Parliament of Victoria passed a law in 1984 requiring "orphaned" embryos to be transferred anonymously to a patient with a disease of the reproductive system (Steinbock, 2011).

Dr. Malcolm Parker of Maine Medical School (Queensland, Australia) questions this position. He is convinced that the use of posthumous reproduction should be allowed, except cases where the person was directly against it during his life and did not want to have children. Dr. Parker defends his presumption of posthumous reproduction by arguing that most people aspire to become parents (Parker, 2004).

Dr. Rebecca Collins of the University of Western Australia also shares the above position. She believes that it is important to understand "what is more legally significant: the lack of the deceased's consent to ART or the lack of the deceased's refusal", since most requests for postmortal reproduction come through sudden and unexpected death. According to Dr. Collins, there are many reasons to believe that people would most likely agree to posthumous reproduction, if they were alive. She also points out that "there is a lack of evidence that posthumous birth is harmful to children" (Collins, 2005).

It should be noted that there are extremely controversial cases of using postmortal reproduction. For example, a British couple created a "designer grandson" by using the genetic material of their dead son. The couple made an unusual decision to collect semen after their only child died in a motorcycle accident. Bypassing strict British laws, the sperm was frozen and exported to the United States, where the couple, in their fifties, decided to use sex selection methods to create a new male heir born by using donor eggs and a surrogate. It is considered to be the first case of this kind in the UK, and it certainly raises serious ethical issues. Even a physician, who is a leading specialist in the field of reproductive medicine, Dr. David Smotrich, acknowledged that ie was an extraordinary case. Dr. Smotrich stated that he helped the couple at his groundbreaking IVF clinic in La Jolla, California. Surprisingly, but he understood that the couple's son, who was not married, did not give official consent to the seizure and use of his semen in case of his death. Lawyers confirmed that those involved in the situation "could have committed a crime and could face the prosecution" (Gragam, 2018).

We also emphasize that most scholars and practitioners currently identify the concepts of "postmortal" and "posthumous" reproduction (Filimonova, 2015). In this regard, there is a need to study the content of those concepts, to determine the criteria for their delimitation, ethical and legal approaches to the legalization of each type of reproduction separately.

RESULTS

The authors of the article have classified ethical and legal approaches to the legalization of postmortal and posthumous reproduction. They have determined the content of the concepts of posthumous and postmortal reproduction and have distinguished the criteria of their differentiation. The authors have formulated own definition of these concepts. The functions of reproductions and characteristic features of legal relations in the researched sphere have been singled out. Propositions for improving the legislation regulating the posthumous reproduction have been developed and directions for improving the legislation on legalization of postmortal reproduction have been defined.

DISCUSSION

The birth of a child at a specific time after the death of one of the parents was interpreted as a posthumous reproduction. Such cases have been known from the ancient times, when the birth of a child occurred after the death of a father (Dakhno, 1997) or a mother (Svitnev, 1996). In this regard, the concept of "Posthumus pro nato habetur" – "A child born after the death of a father is considered born before his death" (Nychyporuk, 2004). Thus, the procedure of recognition of paternity and property rights of a child born after the death of a father or a mother is reflected in regulatory legal acts of most countries. For example, some countries, on the one hand, such as Germany and France, prohibit the posthumous reproduction, while other countries either allow it with certain restrictions or do not regulate the issue at all.

According to the Family Code of the Russian Federation (Part 2 of the Art. 48), if a child is born within 300 days from the death of the husband of a child's mother, the father of the child is the one who died (Family Code of the Russian Federation, 1995).

We emphasize that despite the fact that the legislation of most countries prescribes the procedure for recognition of paternity (maternity) and property rights of a child born after the death of one of the parents, the very concept of "posthumous reproduction" is not defined by the legislator. We note that the domestic legislator does not define this concept. However, he provides the possibility of giving birth to a child after the dissolution of the marriage or its invalidation (Family Code of Ukraine, 2002). It should be noted that one of the grounds for the dissolution of the marriage is the death of the spouses, and therefore, it can be concluded that a child born within ten months from the death of a father will be considered as descended from him (Part 2 of the Art. 122) (Family Code of Ukraine, 2002).

The lack of legislative interpretation of the term of "posthumous reproduction" is causing controversy discussions among scholars.

It should be also noted that most scholars identify the concepts of "posthumous reproduction" and "postmortal reproduction", although; these are two different notions, in our opinion. Let's study this fact in details. Ukrainian researcher H.V. Anikina having studied the content of the concept notes that the concept of postmortal (posthumous) reproduction should be understood not only as the birth of a child after the death of any of the parents, but also the impregnation and birth of a child after the death of one or both of the parents (Anikina, 2013). According to the Russian scholar O.H. Isupova "posthumous reproduction" presupposes that the child's impregnation took place during the life of both of the parents (Isupova, 2017).

According to Shelley Simon, a SJD candidate at Harvard Law School, "posthumous reproduction allows people to create a genetic relationship with future generations, enabling genetically related offspring to carry the genetic material of the deceased. Summarizing the above, we note that posthumous reproduction involves the birth of a child who was conceived by both future parents, however, one of the parents due to certain circumstances, died before the birth of the child.

Therefore, we can distinguish the following criteria for differentiation: the term of birth of a child after impregnation, the absence of ART, the existence of a procedure for recognition of paternity (maternity) and property rights of a child born after the death of a father or a mother in national law (Simana, 2018).

On the basis of the conducted research we formulate the authors' definition of the concept of "posthumous reproduction". It is a voluntary act of an individual (man, woman) wothin life, aimed at fertilization without the use of assisted reproductive technology in order to give birth to a child.

Regarding the definition of the concept of "postmortal reproduction", then, according to N.V. Allamyarova, E.K. Sanakoiev, A.S. Haraiev it is the possibility of conceiving a child after the death of one or two) genetic parents (Allamyarova, 2018). K.N. Svitnev believes that the term of "postmortal reproduction" should be used when embryos that were created during the life of both parents are transferred or a child is conceived (by ART or posthumous insemination) after the death of one or even both genetic parents (Svitnev, 2011).

According to Yael Hashiloni-Dolev, sociologist of health and diseases and member of the National Bioethics Council of Israel, and Silke Shiktanz, professor of medical ethics and history of medicine at Gottingen University Medical Center, posthumous reproduction is commonly used to indicate the deliberate use of advanced medical technology to achieve impregnation, pregnancy and childbirth in a situation where one or both parents are pronounced dead (Hashiloni-Dolev & Schicktanz, 2017).

Let's study the examples of legal regulation of postmortal reproduction in some foreign countries.

The Swiss Federal Act on Medical Assisted Reproduction prohibits the use of reproductive cells after the death of a person, who donated them. The exception is sperm cells obtained from donors (Federal Act on Medically Assisted Reproduction, 1988).

The Belgian reproductive technology legislation allows the conduction of posthumous reproduction after the death of one of them, if both partners have entered into a separate agreement. In this case, the relevant technology can be implemented no earlier than 6 months and no later than 2 years after the death of the partner. Those few months after the death of a partner are given so that the other partner can make an informed decision about the future fate of the embryos (Pennings, 2007).

There is a more strict procedure in Canada, it concerns the written consent to the posthumous use of human reproductive material, and this issue is regulated by the relevant law (Thomas, 2019). This law stipulates that without the written consent of the donor (to perform appropriate actions for a clearly defined purpose) no person may: use the donor's reproductive material to create an embryo; remove reproductive material from the donor's body after his

death to create an embryo and use the embryo *in vitro* (Assisted Human Reproduction Act, 2004).

1) The German Embryo Protection Act (Embryonenschutzgesetz) explicitly prohibits the use of gametes of a deceased person for artificial insemination, punishing the practitioner for up to 3 years of imprisonment or a fine (Gesetz zum Schutz von Embryonen, 1990).
2) The French Law on Bioethics allows assisted reproduction for couples only in cases of medical infertility (thus excluding same-sex couples) (French Loi relative to bioethics, 2011).
3) The French Law on Bioethics is currently being revised and the range of people who can access ART may be expanded, since the French National Ethics Advisory Committee believes that same-sex couples and individual women should have the right to ART (Cotton, 2018).
4) The United States Uniform Parentage Act provides that an individual is the father of a child conceived as a result of assisted reproduction if:
5) A person who intends to become the father of a child conceived by ART dies between the transfer of gametes or embryos and the birth of a child;
6) A person who consents to ART from a woman who has agreed to have a child dies before the transfer of gametes or embryos;
7) A person agreed in writing that if ART had occurred after his death, the person would have been one of the child's parents or clear and convincing evidence demonstrates the person's intention to be the child's father (US Uniform Parentage Act, 2017).
8) The US Uniform Parentage Act sets a deadline for the legal paternity of posthumous reproduction, *i.e.,* the child is born no later than 45 months after the person's death (s 708 (b) (2)). After 45 months the deceased will not be the legal father of any child born by using his gametes. As one knows, the US states are not required to adopt the same law and these provisions, but three US states have adopted the US Uniform Parentage Act as of 2019, and four have submitted the bill for approval (US Uniform Parentage Act, 2017).

The above confirms our thesis that there is an identification of the content of the concepts of "posthumous reproduction" and "postmortal reproduction". In this regard, we suggest to consider as the criteria for distinguishing the concept of "postmortem reproduction" from "posthumous reproduction": the period of a child's birth that significantly exceeds 10 months (or 300 days) from the death of one spouse or two parents; the presence of a genetic relationship with the parents and informed consent to such reproduction and record about the paternity; use of ART or posthumous insemination; passing the obligatory legislative procedure of establishing the paternity (maternity) or guardianship after the birth of a child; settling the issue of ownership of gametes or embryos and terms, rules of storage, use, destruction of genetic material of a recipient; settling property rights of a child born in such a way.

Thus, postmortal reproduction, in our opinion, is a voluntary act of an individual who during his life has given written consent in the will to use his genetic material by using ART methods for childbirth, including after the death, for a clearly defined period.

We emphasize that there are different ethical and legal approaches to the legalization of these concepts. In particular, with regard to posthumous reproduction, it should be noted that the procedure for recognizing a child born after the death of a father or a mother and the legal status are regulated in most countries of the world by Civil and/or Family Codes or special legislation.

In addition, a mother or a father of such a child has the opportunity under the laws of most countries, and usually acquire the status of a single mother (father). Thus, they receive social assistance (payments) for the child (Chekhovskaya, 2017). We believe that it is necessary to supplement (amend) the legislation of those countries that regulate legal relations in the field of posthumous reproduction by introducing the term of "posthumous reproduction" and its definition (Chekhovskaya, 2012). This, in our opinion, will further simplify the procedure of recognizing a child born after the death of a father or a mother. Regarding ethical approaches to the legalization of posthumous reproduction, it should be noted its positive perception in the social and scientific environment, as well as among believers, representatives of various denominations and religions (Quigley, 1996).

The situation regarding the legalization of "postmortal reproduction" looks a bit more complicated. The analysis of scientific works and domestic legislation, as well as the legislation of other countries on the legal aspects of posthumous reproduction allowed us to identify not regulated or insufficiently regulated problems by the legislator. They include: informed donor's

consent to carry out a postmortal reproductive program (mandatory, optional, mandatory in some cases); identification of the owner of gametes and (or) embryos left after the death of one or two parents; determining the legal status of a child born in such a way; settling their property rights (conceived during the life of parent(s) or for many years after the death of paren(s); procedure for establishing paternity (maternity) or the presence of lifelong consent for posthumous paternity (maternity) or its absence; appointment of guardian(s); the presence of a will which would indicate consent to the implementation of postmortal reproduction and an order to maintain a child born in such a way (mandatory, optional); marital status (mandatory, optional); term of birth of a child after the death (presence of restrictions (from one year to 20), absence of restrictions); the existence of restrictions on the posthumous collection of gametes and the implementation of postmortal reproductive programs in the legislation (for example, the collection of gametes from the dead); determining the legal status of gametes or embryos and terms, rules of storage, use, destruction of genetic material of a recipient; the responsibility of the institution that took into storage (cryopreservation) of genetic material for its preservation and destruction (in the absence of consent to its use after the death of the owner); legal liability for the removal of genetic material without the consent of the deceased, which he expressed for life, (mandatory, optional); normative regulations on the protection of genetic information as a special type of personal data (mandatory, optional); legal liability of the subjects of legal relations under consideration.

Ethical approaches to the legalization of postmortal reproduction are ambiguous. Some scholars believe that a unilateral decision on posthumous removal and use of the genetic material of the deceased may pursue a selfish goal. For example, ensuring a safe old age, avoiding loneliness, obtaining financial benefits, etc. (Allamyarova, 2018). Therefore, in their opinion, it is important to establish the true intentions of a person who wants to use genetic material. Besides, they pay attention to the fact that children born in such a way from a social point of view are orphans from the moment of impregnation or, in a best-case scenario – semi-orphans. They also pay attention to the child's mental state and self-identification.

Jonathan Moreno, director of the Center for Biomedical Ethics at the University of Virginia, notes that such a procedure allows a child to be born without the consent of a father. According to him, such a procedure does not oblige a man to express his point of view, unless he agreed to it until his death (Svitnev, 2011).

"How is it appropriate to consciously give birth to a child, when the father has long died?". It is the question of Alexander M. Capron, Professor of Law and Medicine, one of the directors of the Pacific Center for Health Policy and Ethics at the University of Southern California. The attitude to the postmortal reproduction of representatives of different denominations and religions is also ambiguous. Most consider unacceptable the birth of a child in such a way and strongly oppose it (Dakhno, 2009).

It should also be noted that postmortal and posthumous reproductions perform certain functions, which, in our opinion, can be divided into three groups:

- legal group – a group of functions aimed at settling legal relations through legislation: security – aimed at protecting the legal relations of posthumous and postmortal reproduction; regulatory – forms the rights and responsibilities of the subjects of reproduction, determines the grounds for the emergence and termination of such legal relations, their content;
- Ethical group – a group of value-oriented functions aimed at forming the values of intangible goods, stimulating their achievement and respect (for example, the value of human life, humane treatment of the body of the deceased, etc.). The educational group of functions determines the educational impact on society, stimulates the expression of compassion, respect for the will of the donor, the implementation of moral reflection, etc. Development of ethical knowledge – it is a group of functions that involves the creation of ethical committees and the formation of ethical principles of posthumous and postmortal reproduction; development of ethical standards for donor's informed consent.
- Social group forms an understanding and attitude to posthumous and postmortal reproduction in society. This group of functions should include informative, which assists to disseminate information about the programs of such reproductions, popularize the development of scientific

achievements in ART, medical science (in particular, reproductive medicine), medical innovations in ART, and reproductive programs as a type of medical services.

- Legal relations in the researched area, in our opinion, have a number of civil features:
- Participants in such relations act as bearers of civil rights and obligations;
- The special nature of the relationship between the subjects. Legal relations in the field of studied reproductions arise in respect of intangible goods belonging to an individual;
- Dispositiveness, gives the parties the right to determine the nature of their relationships within the limits established by law, and in appropriate cases to form their rights and responsibilities. The donor independently decides the further fate of his genetic material (in case of postmortal reproduction);
- Free expression of will by the parties – means the ability to independently and freely express and form their will. Thus, expression of will by the participant of a transaction in accordance with Part 3 of the Art. 203 of the Civil Code of Ukraine has to be free and correspond to its internal will (Civil Code of Ukraine, 2003). A person during his life voluntarily gives informed consent (prepares a will) for the postmortal reproduction and further maintenance of a child born in such a way. No one can be compelled to realize such a right;
- Legal equality of the parties. Manifested in the fact that the parties are defined as self-sustained, independent of each other individuals, where each has its own set of rights and responsibilities and not subordinated to another one. All participants of such legal relations have both equal rights and equal opportunities for their implementation.

CONCLUSION & RECOMMENDATION

The conducted research allows us to make conclusions about the improper legal regulation of legal relations in the field of implementing the postmortal reproduction programs in some countries and the lack of its legal regulation in most countries; a variety of ethical approaches to the introduction of postmortal reproduction, most of which are opposed to this type of reproduction. In this regard, we believe that the legal relations in the field of implementing the postmortal reproduction programs require more thorough research and based on its results and taking into account the identified problems of legal regulation of this type of reproduction to develop specific propositions on improving both Ukrainian legislation and other legislation of other countries. They include: development of a form of informed consent of the donor to implement a postmortal reproductive program; determining the owner of gametes and (or) embryos left after the death of one or two parents; determining the legal status of a child born in such a way; settling their property rights; clearly standardized procedure for establishing paternity (maternity); appointment of guardian(s); the date of birth of a child in such a way; the existence of restrictions on the posthumous collection of gametes and the implementation of postmortal reproductive programs in the legislation; determining the legal status of gametes or embryos and the terms, rules of storage, use, destruction of genetic material of a recipient; determining legal liability for the seizure of genetic material without the consent of the deceased, which he expressed during his/her lifetime; normative regulation for the protection of genetic information as a special kind of personal data; determining legal liability of the subjects of legal relations under consideration.

The authors have proved the expediency of distinguishing between the concepts of “posthumous” and “postmortal” reproduction; have suggested the criteria of such distinction and have formulated own definition of those concepts. They have also proved the expediency of improving the legislation regulating legal relations in the field of posthumous reproduction, in terms of defining the content of the concept.

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