



Embryo Donation Law in Iran and Some Challenges in Determining the Rights of Donated Children: A Review

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Abstract

Islamic Republic of Iran has provided a legal framework for embryo transfer so that fertility becomes possible with third party intervention. The use of this method of fertility as well as its effects and rules are subject to cultural, social and religious factors. The brief nature of the embryo donation law indicates the lack of adequate measures for the child's future. The present study aimed to review the embryo donation law in Iran and some challenges in determining the rights of the child. This study employed a library, descriptive and analytical method and is based on Shia jurisprudence and law books. By using the keywords of "Donation, Alimony, Custody, and Inheritance", various aspects of the embryo donation law have been investigated. Article 3 of the Embryo Donation Law considers the duties and responsibilities of the couples who donate the embryo and the born child in terms of maintenance, alimony and being mahram¹, similar to the duties and responsibilities of children and parents. However, the important issues of lineage and inheritance are not considered. Neither it elaborates compliance with the principle of confidentiality and the non-identification of the genetic parents, the coercive guardianship of the father, and the prohibition of marriage (being mahram). There is neither enough clarity about the method of evaluating the recipient couple's moral competence, the limit of the number of gamete donations, alimony, or custody. It is necessary to explain the kinship and genetic inheritance, amend birth certificate registration law, specify the rejection of anonymity to prevent the phenomenon of mixing lineage based on Shia jurisprudence, or to add new materials to this law.

Keywords: Child, Confidentiality, Embryo disposition, Embryo transfer, Fertility, Germ cells, Iran

1. An unmarriageable kin in Islamic Sharia legal terminology

Introduction

Infertility and the factors affecting it impair the quality of life by creating psychosocial stress, reducing life satisfaction, increasing marital tensions, and decreasing sexual and marital satisfaction, which in turn disrupt social relations, increase the tendency toward social deviations, and reduce cultural values between couples. Psychological pressures caused by infertility affect couples' attitude towards life and can lead to emotional, social and psychological distress for them (1,2). Studies show that women are more prone to stress (3). According to the studies conducted in Iran, the overall average of infertility is 13.2% (4) and the prevalence of primary infertility is 17.3% (5). Also, 50% of infertile women consider infertility the most challenging issue in their lives. They suggested that the importance of pain caused by infertility is equivalent to the psychological pain of patients suffering from life-threatening diseases such as cancer and cardiovascular diseases (6). The infertility stigma is associated with various psychological and social tensions, especially for women. For most women, fertility is basically giving birth to a child to preserve the family lineage (7). Even in many traditional cultures, husbands of infertile women are more likely to remarry than those of fertile women (8). Social stigma threatens the psychosocial health and self-esteem of infertile women. They use defensive response mechanisms and social support to mitigate these effects. Training focused on coping strategies may be useful against infertility stigma (9). Therefore, infertility is not only a medical or psychological problem. Rather, it is a social problem due to the inability to fulfill one of the basic social roles, *i.e.*, being a parent. Due to cultural and social reasons as well as religious beliefs, having children in Asian countries is a very important factor compared to Western countries (10).

Fortunately, in Iran, infertility is fought with the help of Assisted Reproductive Technologies (ARTs), all of which have been legitimized by religious authorities in Iran. Ayatollah Khamenei's views, unlike other Sunni and even some Shiite jurists, have paved the way for the development of ARTs in Iran (11). His jurisprudence ruling in 1999 allowed gamete donation by third parties to infertile spouses. However, he clarified that the child will be related to the sperm or

egg donor and not to the recipient couple (12,13).

This legal and jurisprudential approach led to the approval of the Iran Embryo Donation to Infertile Spouses Act (IEDISA) in 2003 (14). Table 1 shows the executive order of the law on how to donate embryos to infertile couples.

It is worth mentioning that complete surrogacy, *i.e.*, a surrogate mother carrying a fetus resulted from the sperm and egg of the legal parents (genetic parents), is more accepted and most jurists have ruled that the use of a surrogate is permissible (15). Famous contemporary Shiite jurists, including Ayatollah Khamenei, Ayatollah Makarem Shirazi, Ayatollah Khoei, Ayatollah Bejnordi, Ayatollah Khoei Sanei, Ayatollah Mousavi Ardabili, Ayatollah Khoei and Ayatollah Momin Rahm have considered this alternative as permissible, provided that Haram issues (impermissible look and touch) does not happen during artificial insemination. Some other Shiite jurists, including Ayatollah Tabrizi and Ayatollah Fazel Lankarani, Ayatollah Behjat and Ayatollah Nouri Hamadani ruled that the alternative is not permissible (16,17). According to Sunni jurists, renting the uterus of a third-party woman (not married to the husband) is against the Shari'a and moral standards. The Islamic Jurisprudence Council has made it haram and prohibited. According to Shiite and Sunni jurists, the owners of the egg and sperm are the true parents of the child born from a surrogate womb, and the child is genetically attributed to the owner of the sperm and egg (18-20).

Also, considering that artificial insemination is usually used as a prelude to in surrogacy, the opinions of scholars in this field are different (21-23). Apart from the permissibility or impermissibility of using a surrogate womb, there are other disputed cases, which are out of the scope of this study.

Maternal lineage of the child: Is the woman who carries the fetus and gives birth or the woman who owns the egg the mother of the child?

Is it permissible or not to use a married woman as a surrogate?

What are the effects of kinship and lineage resulting from different ways of surrogacy, *e.g.*, surrogate uterus, egg donation, sperm donation, *etc.*?

The application of these methods in the field of medicine and genetics has opened up the way and

Table 1. Approved embryo donation law in Iran

Approval date: 29/04/1382; Authority of approval: approvals of the Parliament of Iran Details regarding the law on how to donate embryos to infertile couples
Article 1. According to this law, all specialized infertility treatment centers will be authorized to, in compliance with the Sharia rules and the conditions contained in this law, transfer embryos resulted from extra-uterine insemination of legal couples after the written consent of the spouses owning the fetus to the uterus of women who are infertile after marriage and/or carrying out medical procedures for their infertility
Article 2. The request to receive a donated embryo must be prepared and submitted jointly by the husband and wife and the court will issue a permission to receive the fetus if the following conditions are met: A- Couples should not be able to have children according to a valid medical certificate. The wife should have the ability to receive the fetus B- Couples should have moral competence C- None of the spouses should have any legal restrictions D- None of the spouses should be suffering from incurable diseases E- None of the spouses should be addicted to drugs F- The couple must have the citizenship of the Islamic Republic of Iran
Article 3. Responsibilities and obligations of the couple who donate the embryo and the child born in terms of custody and upbringing, alimony and being mahram are like the duties and assignments of children and parents
Article 4. Evaluation of the eligibility of applicant couples in family courts will be assessed out of turn and without compliance with the formalities of the civil procedure and the non-approval of the couple's qualification can be appealed
Article 5. The executive regulations of this law shall be prepared by the Ministry of Health in cooperation with the Ministry of Justice and will be approved by the Cabinet within a period of three months The above law consists of five articles passed in the plenary session of the Parliament of Iran on July 20, 2003 and approved by the Guardian Council on July 30, 2003

made many improvements and has led to amazing progress in these fields (24). It is an important step forward in Iran that the legislator has passed the law on how to donate embryos to infertile couples in 2002. In a report by Abedini *et al*, it is stated that a total of 52 assisted reproductive services centers in Iran performed approximately 29,000 Intrauterine Inseminations (IUI)¹, in addition to 35,000 cycles of In vitro Fertilization (IVF)² and Intracytoplasmic Sperm Injection (ICSI) (25). In cases where the couple's fertility can be done without the presence and intervention of a third party, it will not lead

to further jurisprudential and legal challenges in terms of determining the real parents and the rights of the intended child. However, when fertility is only possible with the presence of a third party (a person out of the marriage contract), such as gamete donation (sperm with egg or embryo donation), many challenges arise regarding the determination of the real parents and the rights of the born child (Table 2). Therefore, the remarkable novel point in this article is that it was an effort to explain the Shia jurisprudence's point of view according to the mental concerns of the recipients of donated embryos. The aim was to investigate some inadequacies of the embryo donation law in Iran and the related challenges in determining the rights of the child.

Materials and Methods

The current research was compiled in a descriptive-analytical way and based on the library method. Related articles from 1990 to 2021 on embryo donation law in Iran and some challenges in determining the

1. For IUI, a semen sample is washed to separate sperm from the seminal fluid and then the entire sperm sample is injected directly into the uterus. This significantly increases the number of sperm in the uterus over traditional intercourse

2. IVF is a multi-step reproductive technology that involves egg stimulation, retrieval, lab fertilization and transfer. Normally, ovaries produce just one follicle each month, but during IVF, injectable hormones are used in an effort to produce multiple follicles. During IVF, mature eggs are collected (retrieved) from ovaries and fertilized by sperm in a lab. Embryos are either transferred into the uterus or frozen for future use

Table 2. Permissible and illegal cases of embryo donation

Permissible and Shariah items	Illegal cases (with the involvement of a third party)
1. Insemination of sperm and eggs of a legal and legitimate couple outside the womb and in a laboratory environment and the transfer of the resulting embryo to an infertile couple (other than the donors) requesting the embryo in a confidential manner	1. Fertilization with sperm and eggs of a third-party man and woman (not married to the owner of the egg or sperm, respectively) and transferring it to the uterus of another woman or a surrogate uterus
2. Insemination of sperm and eggs of a legal husband and wife outside the womb and in a laboratory environment and transferring the resulting embryo to the womb of the wife or the second wife of the man	2. Fertilization with sperm of a man and eggs donated by a woman not married to him in a laboratory environment and transferring to the wife's uterus or a surrogate uterus. (The owner of the sperm is the father of the child. The owner of the egg of the religious mother is considered the child)*
3. Transferring the sperm of a man artificially to the uterus of his wife	3. Artificial transfer of man's sperm into the uterus of a woman with whom he is not allowed to have sexual intercourse (the man owing the sperm is considered the father, and the woman owning the egg and the uterus is considered the mother of the child)
4. Fertilization of a healthy husband's sperm with an infertile wife's egg outside the uterus and the transfer of the resulting embryo to the same woman's uterus	4. Fertilization with the sperm donated by a third-party man (no married to the woman owning the egg) and a married woman's egg and transferring the resulting embryo to the same woman's uterus or a surrogate uterus
5. Fertilization of a healthy husband's sperm with the egg of his temporary wife or his second permanent wife outside the uterus and transferring the embryo into the uterus of his first permanent wife	

* From the legal point of view, the most important challenge in surrogacy is "who is the mother of the born child"? A person who has a genetic relationship with him/her (egg owner) or a person who has a physiological relationship (uterus owner), or both? Religious scholars offer different opinions based on legal and jurisprudential foundations (discussing this issue is out of this study's scope). However, the legal method that is currently used in Iran is as follows: Surrogate mother does not have any genetic relationship with the baby and is not considered a mother, as a result, after the birth of the baby, the surrogate mother will not have any rights over him/her and immediately after birth, she should give the baby to the real parents.

rights of children and the necessity of amending the law or adding regulations were evaluated.

Published studies were searched for in Scopus, PubMed, Science Direct, EBSCO, Google scholar, Magiran, SID, and Iran Medex databases using the keywords of "embryo, donation, alimony, inheritance, embryo donation law". Also, Iran's Civil Law was reviewed. The fatwas of Marjas and other jurisprudential texts and the points of view of Shia religious scholars were examined and analyzed, too. In this review, 22 articles out of the 38 articles found on the law of embryo donation in Iran were examined (Figure 1). To collect information, first, the articles that had one of the above keywords in the title and/or text were selected. The inclusion criteria were case-control studies or review articles published in English or Farsi. The exclusion criteria were insufficient information in the study, lack of access to the full text of the articles, content outside the study scope, and

repetition of the materials. Based on the inclusion criteria, abstracts of articles published in Farsi and English were evaluated, then irrelevant articles were excluded and articles related to the research were identified to obtain their full text and extract data. Finally, 22 studies were included in the study. The working method was such that the researcher first read different parts of the article and took notes of his impression. The re-evaluation was done with the help of the second researcher. The selected points were recorded in a Table and in case of disagreement, the Table of findings was completed by re-examining the articles and during a joint meeting.

Results

In this study, out of 38 articles which were related to the subject at the beginning of the search, 22 were selected based on the inclusion criteria. The law on how to donate embryos to infertile couples and the

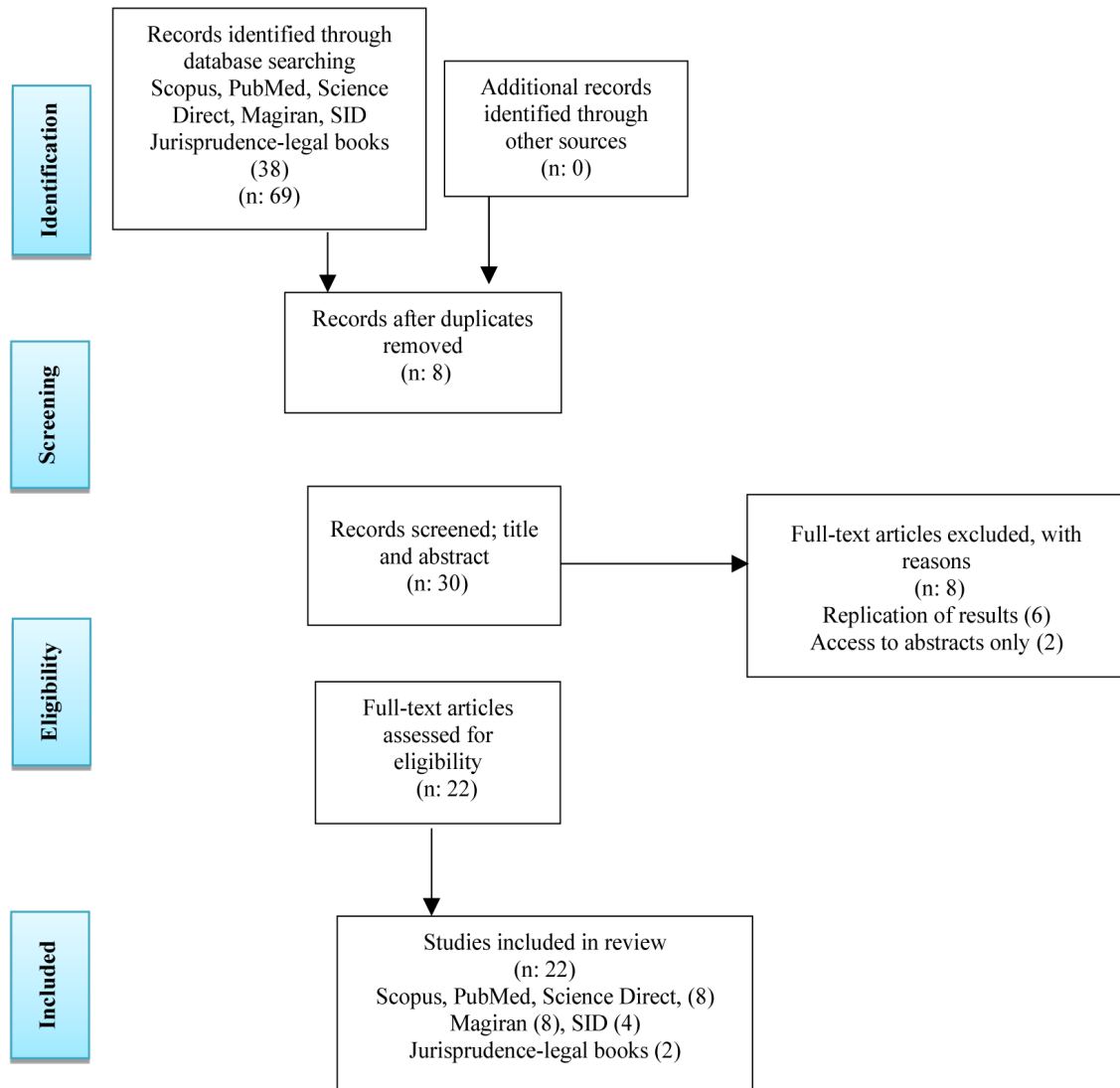


Figure 1. Flow diagram of the searching strategy.

related executive regulations were approved in 2003. The approval of embryo donation law is an important step in the evolution of Iran's regulations in solving issues related to embryo transfer and its various legal aspects. Embryo donation law, despite its innovations and positive aspects and changes it made in the lives of infertile couples, has significant flaws and shortcomings in various fields, including the legal relations of the parties to this phenomenon. Therefore, there have been different interpretations of embryo donation, which are mentioned below (26). The law on how to donate embryos to infertile couples in Iran is very short, consisting of five articles, and its bylaws consist of 10 articles in total. It was prepared by the Ministry of Health and the Ministry of Justice and approved by the Council of Ministers (27). Genetic

lineage (Nasab) and heritage are challenging issues, especially in the Islamic society.

Genetic lineage (Nasab) of the child resulting from embryo donation

Infertility treatment includes a couple (legal husband and wife) and a third party (other than the husband and wife), who donates eggs, sperms, or embryo or provides surrogate uterus. In Iran, we only have laws about embryo donation. Therefore, the law of Iran needs to be amended regarding gamete donation, where it has no declarations, and contemporary jurists disagree on its legitimacy. Article 3 of the Embryo Donation Law states that "the duties and responsibilities of the recipient couple of the donated embryo and the born child in terms of care, education,

alimony, and being mahram for the child are similar to the duties and responsibilities of parents and children”.

In the Iranian law, the complete allocation of the child to the recipient couple of embryo donation is not accepted. According to Article 3, the duties of the donor and recipient are similar to Article 11 of the Law on Protection of Children Without Guardians of Iran approved in 1974. Genetic lineage (Nasab) and heritage are challenging issues, especially in an Islamic society. According to the opinion of jurists that the child belongs to the owner of the sperm, the effect of inheritance has not been established for this relationship (donation recipient) (28). In terms of Shariah parentage, the child is attributed to the genetic parents (embryo donor) and not the applicant parents (donation recipient).

According to the first paragraph of Article 993 of the Civil Code of Iran approved in 1935, it is mandatory to register the birth of every child. According to Article 999 of the Civil Code, the document (identity certificate) issued by the civil registry is official and any changes can be made merely by court order. Information related to gamete and embryo donation is kept in the databases of the medical institution, after the birth of the child, the birth certificate of the newborn is issued under the names of the recipient couple; and no information is recorded in the birth certificate regarding the donated embryo or gamete. Therefore, this official document for children resulting from gamete donation does not prove their Shariah (genetic) parentage. The reason for this failure is that according to the provisions of Articles 12 and 15 of the Civil Registration Law, “birth” is the focus of registration (29,30). Following the silence of the law on how to donate embryos to infertile couples regarding anonymity, in articles 3 and 6 of the executive regulations of this law, the principle of confidentiality of donors’ identity is accepted; However, no measures have been taken to protect the rights of the child. Identification of lineage is not limited to parents; it affects all relatives, including uncles and aunts.

In Article 2 of this law, some criteria have been raised such as the absence of disease, moral competence and other conditions for embryo recipients, as well as the issue of physical health and religious suitability of

donors. Nonetheless, these factors are not enough to ensure the welfare of the child. Also, more research is necessary to ensure maximum benefit of the child regarding criteria such as determining normal physical and mental health of the recipients, their appropriate IQ, the condition of permanent marital relationship, not having a history of addiction or criminal history, their financial status, and so forth. A child inherits his parents genetically or physiologically (inheritance). Today, IVF is not only a medical matter, but also a complex legal issue that lawyers can play an important role in resolving its legal ambiguities by providing appropriate legal conditions and presenting the necessary theories (31). Article 3 of the embryo donation law only mentions some of the effects of lineage (maintenance, education, alimony and being mahram).

The issue of inheritance is not discussed (32). Lawyers and Islamic jurists have different opinions about embryo and inheritance (31). In terms of inheritance, according to the Shia authorities, the child is the heir of the gamete donor, but it is desirable that the child joins the recipients of the embryo with all its effects, including inheritance. In Iran, what is done in the name of embryo donation is the creation of the right of guardianship of the child for the recipient, and other legal rights such as lineage, inheritance and effects related to lineage should be sought in the relationship between the donor and the child (33). Due to the confidentiality of information related to the identity of donors, the relative relationship between the genetic parents and the child cannot be determined leading to the problem of not being able to prove parentage and the impossibility of inheritance between them (30). Also, mahram relatives cannot marry each other based on religion and tradition in Islam. While the embryo donation law does not pay attention to the nationality of embryo donors, it specifies that the recipient must be Iranian (14).

Compliance with the principles of confidentiality and confidentiality of genetic parents’ information

Article 3 of the regulations from the second chapter says “in terms of embryo donation and receipt: embryo donation must be done with the written consent of the parties in the authorized specialized centers for

infertility treatment, with their identity verification and in a completely confidential manner”. However, Article 8 also has given permission to authorized centers to have an embryo bank. According to Article 6, receiving, storing and transferring donated embryos must be completely confidential. The note of the same article considers the classification of information related to donated embryos as confidential. Finally, according to Article 10, “presentation of documents and information related to donors and recipients of donated embryos is allowed only in compliance with the laws related to the preservation of state secrets and to competent judicial authorities” (34). The point is that keeping the information confidential is in the interest of the child and protects it from emotional instability. Also, the child will have a single support and integrated education and will be protected from multiple identity disorders. From the legal point of view, if the donor of the embryo remains secret, it will not have any responsibility towards the child born. The recipient parents will have the position that a real parent has in relation to their child from the child’s point of view (35,36). In a study in Iran, hiding the information of the embryo donor is considered to protect the child from possible harms, maintain healthy family relationships, and suggests the absence of a convincing reason for disclosing this information (37). In almost all reproductive methods using gametes and donated embryos, the right to know the genetic origins of children is another important issue, and according to the Law on the Protection of Unaccompanied Children and Adolescents, the lineage of the child must be recorded and the names of the genetic parents must be mentioned in the child’s birth certificate (38), which is not discussed in the embryo donation law in Iran.

Is there anonymity for gamete donors or recipients?

The man who owns the sperm is considered the father of the child and the woman who owns the egg is considered the mother. Maternal and paternal rules apply to these two and kinship rules apply to other people who are related to the child through them (brothers and sisters, uncles and aunts of this child) (39). Famous Shiites jurists considered that the lineage (Nasab) of people is transferred only through blood.

The civil law of Iran also according to the opinion of the famous Shiite jurists, accepted the establishment of lineage through blood (40). According to the rule of fosterage, a group of jurists affirms the mother being mahram to the child and all the rulings of fosterage also apply. This means that this child belongs to foster mother, foster grandfather, foster grandmother, and foster aunt and uncle. However, regarding the matter of the father’s mahram according to the Sharia law and the Qur’anic verse (Surah al-Nisa Verse 23) which is called Rabibah, is established (40). Child “Rabibah!” being mahram to the husband, only if the husband has sexual intercourse with this woman, he will be mahram to the child. In the Quran and jurisprudence sources, Rabibah is one of the mahrams of the stepfather, and marriage with her is forbidden (Surah Nisa, verse 23). The jurists mentioned that the baby resulting from embryo donation does not become mahram with the parents and siblings of the husband (41).

The guardianship

The issues of guardianship of the father over the daughter and the prohibition of marriage with her (being mahram), are also not discussed or explicitly stated in the law. In any case, the law has shortcomings and inadequacies that require new fatwa and law reform. Regarding the matter of guardianship, for example, in the marriage of girls, the father’s permission is necessary, and the girl must get this permission from her original father.

Evaluating the moral competence of the recipient couple

Article 2, paragraph B says “couples must have moral competence”. The law does not provide a clear definition of moral competence, and each court must decide for itself whether a parent is morally competent or not. This may lead to conflicting court decisions in similar cases.

No restrictions for gamete donation

This is very important in the Islamic society, which is very sensitive to the issue of lineage and being mahram. It is not specified how many times the donation should be made. A couple can donate a large

1. Daughter of another husband

number of embryos in the long run. If these donations are made anonymously, incest marriages and consanguine marriages will happen unintentionally, which, in addition to the problems regarding Islamic Sharia, will cause genetic diseases (35,42).

Receipt of fees by gamete donors

Some researchers believe that if infertility is considered a kind of disease and embryo donation is one of the ways to treat it, sperm and egg donation in treatment centers is also a part of this treatment process.

Therefore, gamete or embryo donors will have the right to receive compensation due to their participation in part of the treatment process. In case of non-reimbursed donation, it should be clearly specified to prevent the illegal purchase and sale of embryos or gametes to applicants (creating brokerage and black market). If the embryo or gamete donation is reimbursable, the amount of the cost or the reimbursable amount or the payment of other costs related to the treatment process should be determined through the financial affairs offices of the authorized embryo donation centers and it should be mentioned in the embryo donation law in general (43).

Lack of clarity about alimony and custody

Article 3 mentions the duties and responsibilities of the embryo donor-recipient couple. If the father becomes incapacitated for any reason, what will be the child's duty after that? Or if the parents live apart, who is responsible for taking care of the child? For example, Article 1169 of the Civil Code of Iran states that if a couple lives separately, the mother is given priority for custody until the age of seven.

Discussion

Having children is a basic social value in Iran. Infertility has an adverse effect on the health of couples and affects their well-being. Having children is considered one of the ways to preserve the lineage, and it is one of the main goals of Islamic law (14,30). From the legal point of view, the law does not clarify the lineage of the child resulting from embryo transfer. Although it stipulates that the receiving couple's responsibilities and obligations towards the infant are the same as those of normal parents

towards their children, it does not specify that they are parents. This becomes very important in a society that is very sensitive to the issue of being mahram (14). Some juristic rules and principles, such as preserving the lineage, guarding the private parts, and covering the sexual organs, are practically considered in Iran based on Sharia laws.

Of course, in some countries such as France, the legislator considered the child to be attributed to the applying man and woman, and it is mandatory to recognize this relationship and rejected the claim of denial of birth (44,45). Article 311-19 of the French Civil Code approved on July 29th, 1994 stipulates that no lawsuit can be filed regarding the donor's responsibility towards this child. Also, Article 311-20 of this law does not consider any claim of negation of lineage by the donor in connection with the child resulting from medical fertility to be heard. It has also stated that consent to medically assisted reproduction prevents any lawsuit related to proving or denying the parentage of the child, unless it is proven that the child was not the result of medically assisted reproduction or the initial consent to the legal reason, for example, the occurrence of divorce, has been ruled out (29), or the initial consent has been revoked due to legal reasons such as divorce.

According to the Shia school of Imamia, the attribution of the donated embryo is to the owners of the sperm and egg, which is the basis for deducing other cases. Therefore, the donated embryo has "lineage (Nasab)" at the time of donation, but it cannot be easily attributed to the donor recipient (46). Considering that the relationship between the child and the parent is of the guardianship type, it seems that guardianship cannot be transferred and the father cannot transfer or abort this paternal position (47).

Therefore, considering the non-transmission of lineage to the donor, according to the Shia authorities, it is necessary to amend the civil registration regulations in this regard so that the exact identity and genetic identity of the children resulting from gamete and embryo donation, like other children of a person, are registered in registry documents to prevent the possibility of genealogy confusion. However, for the benefit of the donor and the child, it is not necessary to be public in the child's birth certificate, but it can be queried about in the registration documents, since,

at present, the relevant authorities regarding the determination of lineage and arranging the traces of lineage on a person use the civil registry information and they inquire it from the National Organization for Civil Registration (29). On the other hand, some researchers suggested that the third article of the law on how to donate embryos to infertile couples should be changed as follows: “All the duties and responsibilities of the child and the parents are between the couple receiving the donated embryo and the child born in this way, such as custody, alimony, being mahram, and inheritance” (47). The findings indicated that the donated child is the true heir of the gamete donor. However, it is not possible to blame the embryo donors for the lineage and its effects, such as inheritance. As they did not intend to have children, they cannot be responsible for such duties. Rather, with the intention of helping infertile couples, they have given their embryos to infertility treatment institutions for free to help infertile couples to have children. The relation of the child to the recipients of the fetus with all its effects, including inheritance, has been accepted in some countries such as France, while in Iran, due to the contradiction with jurisprudence and law, it needs a new fatwa (48). In Iran’s legal system, inspired by Islamic law, according to Articles 861, 862, and 864 of the Civil Code, inheritance is due to having a lineage (49). A researcher also suggested that in order to prevent the deprivation of the child from the right of inheritance, their share needs to be preserved if the heirs of the sperm owners are aware of such child being born, and if they are not due to the confidentiality of the embryo donation and the anonymity of the donors, the legislators should plan so that the right of the child from the property of the recipients of the donation will be determined in the form of a will before death (47).

Laws can stay effective in the legislative field of countries in a stable and powerful way if they rely on the ideological and intellectual principles and foundations of societies in addition to paying attention to social realities. Resorting to new scientific findings to solve problems requires their compatibility with human nature and accepted values of society (50). In the findings, it was pointed out that the principle of confidentiality of the donors’ identity should be taken into account. But on the other hand, according

to Article 7 of the Convention on the Rights of the Child, knowing the “identity of the parents as much as possible” is considered a child’s right, and this right is included in domestic and international regulations. It has been reflected in different countries and has committed them to guarantee this right in their national laws (51). In Iran’s legal system, legal and biological parents cannot be separated in the law of embryo donation, which violates the rights of the child (29). Some Iranian law experts also believe that the principle of confidentiality is against the Convention on the Rights of the Child; and no one can take it away from the child (48). In Europe, confidentiality of donor information is still legal in 18 countries, including Spain, France and Denmark (52). In some countries, such as Austria, Croatia, Finland, Malta, Portugal and England, confidentiality of donor information for recipients is applied, but children born can have access to the identity of donors at an older age (53). Other researchers believe that fertility programs and professional organizations should encourage those using donor gametes to tell their child their true origin as soon as the child can understand reproduction in general (36).

Ardakani *et al* concluded in their study that “based on the standards of Islamic jurisprudence, including the need to preserve the natural rights based on lineage, the need to be cautious in establishing and preventing the mixing of lineages, and the need to strictly observe religious rules legally necessitate to register this information to be able to obtain genetic information when needed, and to protect the rights of the child born from these methods. Thus, a fundamental revision of the internal regulations of the law is inevitable” (42). In their results, they mentioned having no law about being mahram, *i.e.*, if the donors have a child that they have given birth to, it will be a sibling of the donated embryo, thus marriage between them is prohibited. The findings pointed to the lack of restrictions on embryo donation, which increases the possibility of incestuous marriage, especially in small cities. In addition, it is possible that couples donating embryos or gametes are relatives, causal or foster relatives of couples receiving embryos or gametes, and the donation law does not discuss the issue. Therefore, it is necessary to explain that if one of the recipient couples (of any rank and class) is consanguineous

with the legal donor couples, they are not allowed to transfer gametes. Centers providing medical services must comply with this, otherwise they will be punished with a proportional guarantee (43). It was found in the results that some people believe that they will receive a fee in exchange for donating gametes. It seems that it is possible to sell parts such as sperm and egg, which are not harmful to be separated from the human body or whose damage can be compensated. In confirmation of this matter, some jurists have given the following opinion: "Man's products can be bought and sold due to their property" (54,55). Some people are of the opinion that the contracts related to those parts of the body that cause slight and uncertain damage to the human body and have a rational and legitimate benefit and on the other hand have a public benefit are valid and permissible (56). Since donors play a significant role in the treatment process, their action is useful and liked by the society, and they should not be accused and blamed for receiving financial rewards or compensations for this vital action. Although paragraph C of Article 2 of the Law on Embryo Donation to Infertile Couples mentions that embryo donation is voluntary and free, but according to legal principles, the compensation clause in this contract does not conflict with its free nature and requirements (57).

In the end, there are questions that are still unanswered: If some medical requirements and considerations require the parties to refer to each other for their treatment, is this possible? If the recipient couple loses the conditions and competence to care for the child in question after some time, or if the donated child is left unattended due to their death, is there a right for the born child to refer to the gamete donors? What will be the contribution in this situation?

Research limitations

Due to the limited number of scientific research articles, the author could not investigate the new topic more widely. Also, the originality of the subject, the lack of sources and the absence of previous jurists in this subject are other limitations.

Recommendations

Not having a comprehensive law that covers all possible issues can cause many legal problems in the

future. The occurrence of fraud (failure to fulfill the legal covenant) on the part of each donor or recipient of embryo donation and the medical staff can have an adverse effect on the fate of the child.

The return of the child is after proof of parentage. For example, if, for any unplanned reason, the donor of the embryo requests the return of the child, despite the financial and psychological costs incurred by the recipient couple, the court will give the child to the original owner of the embryo due to the lack of an approved law.

It is suggested that the legislator specify other methods of reproductive assistance in the law (e.g., sperm donation, egg donation, gamete donation, surrogate uterus, *etc.*) which are performed by medical service centers. For each method, clear duties with the guarantee of the executors shall be described, and rules for illegal embryo and gamete donation and collection shall be established against offending persons and centers.

Many of the things that are foreseen in the regulation should become law. Articles 5, 6 and 10 of the regulations are related to the tasks and duties of the authorized infertility treatment centers and non-disclosure of information related to infertility treatment and the like. Such issues shall be mentioned in the law, not the executive regulations of the embryo donation law (58).

Conclusion

This article concludes that despite the large number of benefits considering legal embryo donation, it lacks clarity and is subject to misunderstanding. The law of donation in Iran has mentioned only some effects of lineage (maintenance, education, alimony and being mahram) without mentioning transfer of a child to the receiving couple or discussing the issue of inheritance. From a legal point of view, the law does not clarify the legal status of the lineage. Although it specifies that the receiving couple's responsibilities and obligations towards the infant are the same as normal parents towards their children, it does not specify if they are parents. After embryo transfer, the recipient couple usually leaves the ART clinic for good. The baby is officially registered as their child in the official documents of the pregnant woman and her husband. Despite the original fatwa as well

as the legal system that still considers the genetic relationship as the most important issue, it has been ignored.

Since according to the fourth article of the Constitution of the Islamic Republic of Iran, all laws must be in accordance with Sharia regulations, therefore, the amendment of the law on the method of donating embryos to infertile couples approved in 2003 and its executive regulations is inevitable. Clarifying the duties of recipients of donation, genetic connection and inheritance, amending the law governing the registration of registry documents and clarifying confidentiality and preventing the phenomenon of genealogy mixing, it seems necessary to review the

fatwa of the embryo donation law based on Shia jurisprudence or to add to this law.

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Conflict of Interest

Authors declared no conflicts of interest.

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