



Commitment Theory as the Theoretical Framework in Third-Party Reproduction

Zohreh Behjati Ardakani¹, Mohammad Mehdi Akhondi², Amir Hossein Khodaparast³, Fahimeh Ranjbar⁴, Mehrdad Navabakhsh^{5*}

1- Department of Sociology, Central Tehran Branch, Islamic Azad University, Tehran, Iran

2- Reproductive Biotechnology Research Center, Avicenna Research Institute, ACECR, Tehran, Iran

3- Iranian Institute of Philosophy, Tehran, Iran

4- Nursing and Midwifery Care Research Center, School of Nursing and Midwifery, Iran University of Medical Sciences, Tehran, Iran

5- Faculty of Humanistic and Social Sciences, Science and Research Branch, Islamic Azad University, Tehran, Iran

Abstract

Assisted reproductive technology (ART) and third-party reproduction provide the opportunity for infertile couples to have children through different genetic links. This type of treatment has created many challenges for infertile couples. With this treatment, the infertile couple will have a child who is biologically related to the gamete/embryo donor. Accordingly, the transformation that occurs in the structure of traditional families and the concept of parenthood is one of the main consequences and challenges which requires in-depth research. In spite of the successful expansion of infertility treatment and third-party reproduction, there is still no proper social context for implementing third-party infertility treatments in Iran. Therefore, despite the need to use the technology, some couples refuse the treatment unless their confidentiality is preserved. Many couples follow the practice surreptitiously by keeping the donation treatment confidential, to get rid of the existing social stigma and protect their identity, the child and the donor's identity. Commitment theory as a theoretical strategy is proposed to solve the problems of all parties involved in this type of "social and non-biological" parenting. Commitment theory in the context of third-party reproduction expresses the commitment to the contract accepted by the donor and the recipient of the gamete/embryo, based on which, the recipients consider the resulting child as their own, and are committed to all the related paternal-maternal rights and duties such as "alimony" and "inheritance". On the other hand, the donors undertake to waive all their paternal-maternal rights and duties by donating gamete/embryo.

* Corresponding Author:
Mehrdad Navabakhsh,
Faculty of Humanistic and
Social Sciences, Science
and Research Branch,
Islamic Azad University,
Tehran, Iran
E-mail:
navabakhsh@srbiau.ac.ir

Received: Jan. 4, 2022
Accepted: May 23, 2022

Keywords: Commitment theory, Donation, Infertility treatment, Third-party reproduction

To cite this article: Behjati Ardakani Z, Akhondi MM, Khodaparast AH, Ranjbar F, Navabakhsh M. Commitment Theory as the Theoretical Framework in Third-Party Reproduction. *J Reprod Infertil.* 2023;23(1):3-10. <https://doi.org/10.18502/jri.v24i1.11903>.

Introduction

Infertility has always been regarded as the human main problem in the field of behavioral and medical sciences (1, 2). Assisted reproductive technology (ART) along with third-party reproduction offers several options for infertile men and women with a defect or lack of one of the main elements in reproduction, such as

sperm, egg, or embryo, thereby helping the couples to have their own children. Over the past four decades, infertile couples have used a variety of alternative therapies to conceive including gamete/embryo donation (3, 4). The process of gamete/embryo donation requires the controlled ovulation stimulation of the partner/donor and collec-

tion of eggs at the right time and consequently fertilizing them with the sperm of the partner/donor *in vitro*. In this method, the resulting embryo/s are transferred to the uterus of the applicant's infertile wife, 2-5 days after embryo development (3). Embryo donation is the first line treatment in cases of infertile couples with both impaired sperm and egg though the prevalence of such problem is rare. By using this technology, although the opportunity for having children is provided for the infertile couple, from the biological and genetic point of view, the origin of the becomes a matter of debate. In this way, the child's genetic link with the gamete or embryo donor is preserved, while, he is born and raised by an infertile couple requesting to have a child. Using this technology, all the problems associated with a group consisting of foster parents, children with different genetic links, and genetic parents must be addressed (5). In fact, these methods will change the traditional family structure and make the concept of parenting difficult (6).

In religious societies, despite the emphasis of religion on fertility, the social and ideological beliefs of the people and infertile couples are effective in the use of ARTs and third-party reproduction (7-10). In Judaism, it is permissible for an infertile couple to have children through IVF. There is no clear commandment in the Torah against donor sperm or egg, but it emphasizes the need for fertility and reproduction. Judaism allows infertile couples to be fertilized through other's gametes or embryos to have children (11). In Christianity, only the Catholic Church has imposed restrictions on the use of IVF. They only allowed the transfer of the gamete or embryo of the partner into the spouse's uterus and rejected the transfer of the donated gamete or embryo (12). In countries with the largest Sunni Muslim populations, any kind of third-party fertility is forbidden and considered adultery or Zina (13-17). However, in connection with ART treatment, some issues such as "changes in the normal method of reproduction by using reproductive technologies" which have been controversial in the Catholic faith or unacceptable, were answered easily in Iran by some Shiite scholars (18). The features that differentiate the Iranian scholars from others is that the Shiite has less objection and disapproval in comparison to the other branch of Islam regarding the practice of using ART and donation. In fact, in Iran, the act of embryo donation to infertile couples (19) was legitimized through the

legal system and approved by the Islamic Consultative Assembly, and confirmed by the Guardian Council in July 2003 (20). Despite the approval of the law and the desire of infertile couples to use such methods of infertility treatment, the general public is not familiar with such scientific development and legal action. This causes many problems for the donor, recipient, and the child (21, 22).

In Shia jurisprudence, all the legal duties and rights of the parents towards the child are the responsibility of the owners of the egg and sperm. The preference of recipients of sperm, egg or embryo is to have a child of their own with all rights and duties preserved. Moreover, the donors intend to transfer all the legal responsibilities to the new parents. According to the embryo donation law in Iran, some parental responsibilities and duties of biological parents are assigned to social parents (18) while the regulations about other duties of biological parents such as guardianship, alimony, and inheritance remain silent, ambiguous, and unanswered, leading to many problems and concerns for recipients and donors.

There are several challenges in third-party fertility treatments in Iran that remain unsolved after the passage of nearly two decades since the adoption and legalization of embryo donation. The purpose of the current research is to investigate how gamete or embryo recipients can demand parental rights so that the child would stay with them forever and whether the efforts of the donor in taking back the child from the recipients would be effective or not. Moreover, an attempt was made to assess the possibility of whether the offspring born from the donated gametes or embryos can claim the inheritance from the biological parents.

Despite the possibility of gamete or embryo donation in Iran, unfortunately, due to the conflict between laws in Iran and Sharia fatwas, bitter incidents have occurred. Taking the child back from the recipient to the donor after years of the child's birth based on the claim of donors, and also the issuance of a birth certificate for the child with the name of the donor, or the issuance of a birth certificate without mentioning the names of social parents are the most common problems in the practice of third-party reproduction.

In order to prevent future possible damages to the stakeholders (donor, recipient, and child), in this paper, in addition to the emphasis on the confidentiality of the treatment based on the "execu-

tive regulations of the law on how to donate embryos to infertile couples", the commitment approach is introduced as an acceptable legal solution for the problems of such couples. This can be used as a strategy to solve the mentioned problems by assigning the duties and rights of the parents to the recipients and waiving the obligations imposed on the donors according to the following principles.

Formation of the commitment approach: In Islamic jurisprudence, fatherhood and motherhood are related to the origin of sperm and egg, which corresponds to the biological perspective. This view considers the owners of gametes as the origin of the child, and accordingly emphasizes on the rights and duties of the owners of the embryos (gametes) and the resulting child. IVF technology has provided a new opportunity for infertile couples whose reproductive organs do not produce normal eggs, sperm, or embryos. In this way, gametes or embryos can be obtained through donation. There are two types of donations, including donating without any financial expectations or donation in exchange for money. In such cases, the donor usually does not claim any rights from the resulting child and does not expect the born child to be his own property. Through this biological perspective, the nature and origin of the formation of the embryo or child are attributed to the donor of the gamete or embryo. In Islamic jurisprudence, lineage and paternity are connected to the provider of sex cells (gametes) and the rights and duties of the child are not taken away from the biological parent through the donation and relinquishment or sale of gametes or embryos. In organ donation (kidney, corneal graft, heart, liver, etc.) from one person (the organ donor) to another person (the recipient), the recipient's biological background and identity doesn't change but gamete or embryo donation results in a full genetic linkage between child and the donating couple. In organ donation, only the organ is donated to the recipient and there is no change in the identity and nature of the recipient after the transplant.

Futility of donation treatments in the absence of parental responsibilities: The decision of infertile couples to take advantage of donation method is to solve the problem of having children so that they can continue to have a happy life together. For this purpose, they accept treatment using gametes or embryos of others with the assumption that they will have children with parental responsibilities, rights, and authorities over their child.

Their childbearing provides the evidence that they are not recognized as infertile couples anymore among their relatives, friends, and in society. On the other hand, the recipient's enthusiasm and interest in having a child are followed by the readiness to accept all the responsibilities arising from this type of childbearing.

Meanwhile, the people who donate their gametes or embryos through donation, relinquishment, or sale, do not intend to have a child and they are not ready to accept the parental responsibilities and commitments. The donors do not expect to accept responsibility for the birth of a child resulting from their donated sperm, egg, or embryo. The donors usually donate only after ensuring that there are no potential expectations from the recipient, the child and that donor attachment has been disrupted, unless they are not familiar with the consequences of donation.

Solving the problem of infertile patients who need gamete/embryo donation to improve their unstable situation is one of the main reasons for donation treatment in Iran. Despite the possibility of donating gametes/embryos in Iran, in some cases, especially when appropriate confidentiality protections cannot be maintained during donation procedures, the possibility to take the child back from the recipient is provided, due to the lack of comprehensive legislation and the Shiite jurists' fatwas.

The existence of religious fatwas on the possibility of donating gametes/embryos and assigning the child resulting from the donation to the sperm/embryo donor created many problems for all stakeholders. Although in the Embryo Donation Law approved by the Iranian Parliament in 2004, some paternal and maternal duties have been assigned to gamete/embryo recipients (social parents), this law has not been able to solve the problems caused by this treatment; in fact, the law does not specify the assignment of parental rights to the recipient. Fatwas issued by scholarly authorities consider the child as belonging to the owner of the gamete (donor), which is against the spirit of the approved law. Providing gamete/embryo recipients with the legal protection of having a donated child is very important for infertile couples who have no other way to have a child except through this treatment. This action provides the basis for the proper use of treatment and eliminates the feelings of hopelessness and anxiety about an unknown future.

Achieving parenthood by application of commitment approach: The development of societies, communities, and the availability of infertility treatments, including donation, have widely changed the traditional concepts of maternal and paternal origin. Since most patients have not been able to solve the problems arising from the conflict of law and fatwas in donation, they have followed the path of treatment surreptitiously. In order to solve the problems of donation procedure, it seems that a non-biological theory can explain the definitive determination of the social parents of the children resulting from the donation treatments. Commitment approach is an efficient instrument for providing a suitable and acceptable basis to support this type of treatment. In Iranian law, "commitment" refers to the legal relationship based on a contract or irrecusable obligation whereby a person is obliged to perform an act or transfer and deliver a property (23) and this concept is also accepted by Sharia.

According to this approach, a contract made by the donor and recipient should address the needs and expectations of the donor and the recipient. Commitment must have a compelling force. Based on this contract, the recipients are the legal parents of the resulting donor-conceived children with all the rights and responsibilities of a legal parent and the donors have no rights or liabilities towards the child. Under the agreement and contract, recipients are bound to their respective parental and maternal rights and responsibilities, including "custody of the child" and the transfer of "financial inheritance" to the child. Likewise, the donor also commits to waive all paternal-maternal rights and duties through donation. Accordingly, the commitment approach can provide a suitable solution to the theoretical and practical issues resulting from third-party reproduction, maintaining parental and financial support for the child.

Realizing parenthood with preservation of human dignity: In the United Nations Charter and other international documents, the equality of nations and governments, the observance of social welfare to preserve human dignity, and the role of individuals in determining their future and destiny are widely discussed, and humans are considered as the main authority in all discussions.

For this reason, a common approach can be recognized in the preparation and formulation of the laws and regulations of the countries. Access to treatment is the fundamental need of human be-

ings. Today, treatments such as infertility treatments and donation are considered a public right in the health system of many countries. In the legal system of these countries, the right to marry, form a family and have children is part of human rights and the governments have committed to removing barriers and providing appropriate circumstances (*e.g.* financial) to protect and fulfill the legal rights of their people. Infertility treatments strengthen the foundation of the family and thus maintain its legal framework; the implementation of this right has been emphasized in many international documents. Article 16 of the Universal Declaration of Human Rights grants the right of family formation to every man and woman irrespective of racial and nationality differences. In Paragraph 2 of this article, the family is defined as the natural and essential group of society, and based on that, people have the right to receive support from society and the government (24). In articles 17 and 38 of Arab Charter on Human Rights, the importance of establishing and survival of family is discussed and family formation is considered as an absolutely indispensable need (25, 26). Principle 19 of the Constitution of the Islamic Republic of Iran has also emphasized that people of Iran must enjoy equal rights, regardless of any discrimination. In principle 29 of the same Constitution, social security, and the need for health and therapeutic services has also been regarded as public rights. This principle clearly shows the law-centered attitude to the subject of treatment and social security. But some doubts have been raised about the duty or right of an infertile couple to have children. The source of such doubt is related to the fact that if the right of having a child is not for everyone, infertile couples who are unable to have children must be exempted from taking responsibility for the child. On the other hand, if childbearing is considered a legal right for every individual in society, therefore, the opportunity to use all types of ART treatments, including donation, should be provided for every infertile couple.

Donation as an assisted reproductive technology is an alternative for many infertile couples in the world. Therefore, this treatment reduces many individual and social consequences caused by infertility. From this perspective, the practice of donation is completely justifiable. When people are helping others in protecting their right to have children, their assistance is consistent with the primary principles of compassion and profitabil-

ity. Therefore, protecting infertile couple's rights in having children through the use of ART treatments and third-party reproduction is necessary in order to preserve human dignity and ensure people's access to their fundamental rights.

The philosophical foundation of commitment approach: The commitment approach is based on theoretical foundations designed to solve practical problems arising from third-party reproduction. This theoretical approach is generally based on the intention, parental decisions, and causal theories of parenthood. It is clear that the application of this theoretical approach requires legal support in conducting ART treatment and donation, which covers all the different aspects of embryo donation and childbirth. Moreover, legal strategies need to be developed and implemented to explore issues such as lineage, inheritance, rights and responsibilities of the recipient, donor, and child in a donation procedure. In applying the commitment approach and assigning parental rights and responsibilities to the treated couple, the following should be considered:

Donor's intention to support infertile couples: Some legal theorists consider intention as the basis of parenting (27-29), and assert that donors have no intention of becoming a parent. Their only intention is to help infertile couples to have children by donating their oocyte/sperm or embryo. Therefore, donors do not feel a sense of belonging to the child, even though the biological and religious bond with the child remains perpetually. Also, intention-oriented theorists argue that the donor has carefully and intentionally decided to follow the practice with full knowledge of the whole procedure. Accordingly, the commitment approach creates a theoretical hypothesis that the maternal/paternal rights and responsibilities are transferred from donors to the recipient infertile couple and they commit to accept all the responsibilities towards the child. From the social perspective, the transfer of rights and duties indicates that parental rights and responsibilities of parents are not innate in nature.

The intention of the recipients to have a child: Another area of the commitment approach is related to the person's intention to become a mother or father (30, 31). Accordingly, infertile couples can use the donated gametes or embryos and take the full parental responsibilities and parental rights of the child. On the other hand, the gamete or embryo donors do not want to be accountable to the

child. Since infertile couples deliberately seek to have a child and the consequent challenges are inevitable, they try to manage the unforeseen conditions and take care of all mounting challenges as their main desire is having a child; in fact, they are definitely ready to fulfill the duties and roles of parenting.

Based on the intention and demand of the persons, the paternal or maternal rights and duties, ingrained in biological discussions, will convert into reality. Following that, the paternal or maternal commitment changes from biological relation to ethical and social relations (32). In general, philosophical arguments are established based on the intention of individuals. If it is accepted that the special duties of individuals are determined by their intention, opinion, and will, then it is reasonable to conceive that the duties of parents have been determined by their will, consent, conscious decision, and preference.

Also, parental duties are related to role-playing. Although role playing can be regarded as an unconscious behavior, it is accepted that the assumed roles of mature persons (unlike innate behaviors) require voluntary acceptance. Therefore, it seems that the duties of the paternal role are conventional; therefore, the scope of behaviors is bound by the cultures, society, and laws. Therefore, in specific conditions like infertility, such extensive responsibilities should be assigned to individuals based on their consent and free will; otherwise, inequality will grow in society. When a consensus is reached about the fact that paternal duties are conventional and based on commitment, then the scope of conventional duties and actions can be explained by referring to maternal or paternal social traditions.

Functional explanation of parental commitments: The persons who play the parental role in the child's life or are committed to performing it are regarded as fathers and mothers due to the conventional role-playing. For this reason, some have argued that the primary paternal/maternal basis is childbirth (30, 33). Therefore, the surrogate will have the primary claim for the parental rights and responsibilities in new forms of childbirth, i.e. in vitro fertilization in which the childbearing woman differs from the genetic mother of the child. This can be expanded to the persons in addition to the childbearing mother who will play a paternal or maternal role in the upbringing of the child. Two main considerations support this claim. The

first consideration focuses on the child's benefits. When a couple takes care of a child for a considerable length of time, it forms a traumatic memory when the child is separated from them. In this regard, introducing the childbearing mother or caretakers of the child as the child's father or mother will bring the maximum benefits for the child. This argument can be the underlying ground for establishing laws in responding to the claims of childbearing mother or recipient and the parents who legally take the responsibility to bring up the child as the fathers or mothers. The second argument indicates that the parents deserve rights against their work. The childbearing mother will suffer complications of pregnancy and childbirth. Such an explanation also encompasses the couples who play parenting roles, bear all the costs of raising children, and thus undertake considerable work. Therefore, it can be thought that they also commit to acting as fathers or mothers.

The causality as the foundation of couples commitment: In the end, the basis of commitment toward paternal or maternal duties and rights can be defined by the concept of causality. The difference between causality and intention of the persons is that one can be the cause of an event without intending to cause it. When a person is not aware that his/her actions bring about specific changes, he or she can be regarded as the cause of such conditions or changes. On this basis, the genetic maternity roles and care are significant in the creation or growth of the child, and in cases where the infertile couple wants to act as the mother or father, their conscious decision is the main reason that necessitates assuming paternal or maternal rights and duties; also, the born child will assume filial devotion toward the couple.

Generally, each of the four elements or all of them together (*i.e.* genetic link, intention and will, performance and role-playing, and causality) can be the basis for waiving or transferring paternal or maternal rights and duties to another couple. This means that the infertile couple commits to take on parental roles based on their conscious volition or intention, plan in childbearing, or their causal role in having the child or all of these factors. This is quite clear that the child born through donation belongs to those who have biologically created the child. In other words, it is not necessary to ignore the biological relation of the child born through donation to provide a legal framework for solving theoretical problems in using third-party reproduction. It seems that efforts in changing the pre-

sumptions about biological lineage are ineffectual in practice. Commitment approach is a basis for waiving parental duties of the donors and commitment of the infertile couples to accept the responsibilities of the biological parent.

Relationship of the commitment approach to the confidentiality in treatment: ARTs have solved the childbearing problem of the infertile population. Infertile couples have been informed about the possibility of treatment and welcomed such treatment. However, the technology is not desirable for many couples. On this basis, using third-party reproduction for infertility treatment cannot be expected to be easily understandable in some socio-cultural contexts; in fact, a limited number of people in society are familiar with the technology and their specific needs urged them to follow such procedures. Infertile couples are seeking treatment; therefore, the appropriate social context is a prerequisite for avoiding stigmatization.

Infertile couples, searching for ARTs, live in a social environment and are in touch with relatives, friends, and colleagues. In the social context, the concepts are developed through the interaction of traditions and some issues such as marriage and childbearing are completely recognized as natural phenomena, supported by society as essential elements in creation. In these cases, there are no opposing or different viewpoints. However, in particular cases, such as childbearing through ARTs and donation, unawareness of others about the procedure of treatment, and conventional behaviors make the infertile couples dubious to follow the treatment and ultimately prevent further efforts.

History is the evidence that obtaining public acceptance of laypersons about cutting-edge technological developments is a labor-intensive effort. Therefore, even like Iran, if the religious authorities permit the use of this therapeutic technology after being informed of the methods (as they have permitted) and the Members of Parliament approve and enforce the law on technologies such as embryo donation (as they have done so), the uninformed ordinary persons, as well as the executive authorities may create obstacles in the path of performing such treatments. Currently, in Iran, cases such as issuing a birth certificate for a child resulting from infertility treatment, registering donor information in the birth certificate, registering information regarding the child's right to know the donor's biological identity or concerns about his future marriage with close relatives, are some of

the recipient's problem. Iranian infertile couples are concerned about disclosure of their treatment option. Therefore, couples prefer complete anonymity in order to prevent problems and stigma associated with infertility (8).

On this basis, considering the necessity of confidentiality of patient information in medicine and in line with the Act of Embryo Donation, it is necessary to avoid any action to disclose the infertility treatment information and the identity of the recipient and donor. In several countries, particularly in Iran where there is no strong legal support for this treatment, it is recommended to keep the child unaware of the issue which will result in establishing natural emotional relationship between the child and the gamete or embryo recipients. To reach comfort during treatment and reduce social stigma, the individuals should adhere to confidentiality principles and also focus on providing benefit to the child and community, making avail the stakeholders (donors, recipients, and child) of the benefit of such technologies. Confidentiality is critical for the stakeholders whereby the security of family, child, and community is protected.

Conclusion

The commitment approach provides a strong theoretical basis for the social and legal barriers of third-party reproduction. Some researchers emphasize on disclosing the identity of the child born by third-party reproduction (22, 34), but these attempts underscore the biological relation of the child with the owners of gamete/embryo and ignore the rights of recipients; they sometimes complicated the issue by focusing on the increased number of fathers and mothers of the child, thus ignoring the child's social and psychological conditions. According to the commitment approach, the relationship between gamete or embryo recipients and donors is based on the contract through which the donors waive their rights and duties, and on the contrary, the recipients are committed to the parental rights and responsibilities based on this contract. Such a contract has no legal and jurisprudential barrier. It can also bypass the shortcomings of the Act of Embryo Donation in Iran and prevent subsequent practical difficulties and guarantee the persons' rights and duties. In addition, the commitment approach has a solid philosophical basis; considering all types of explanations of parental relation and the special problems associated with them, it can be found that the

commitment approach targets all aspects and responds to many challenges, implying that apart from biological relations, conscious volition or practical considerations, or even causality in parenthood, all duties, and rights assigned to individuals are transferred to gamete/embryo recipient. In addition to the above-mentioned points, one should pay attention to the provision of suitable social ground for the adoption of third-party reproduction. Keeping confidentiality of information in the donation process is the prerequisite for the success of treatment. In fact, the efficacy of the commitment approach entails confidentiality in the treatment process of third-party reproduction.

Conflict of Interest

The authors declare no conflict of interests.

Funding: This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

References

1. Dyer SJ. The value of children in African countries—insights from studies on infertility. *J Psychosom Obstet Gynecol*. 2007;28(2):69-77.
2. Martins MV, Basto-Pereira M, Pedro J, Peterson B, Almeida V, Schmidt L, et al. Male psychological adaptation to unsuccessful medically assisted reproduction treatments: a systematic review. *Hum Reprod Update*. 2016;22(4):466-78.
3. Akhondi MM, Behjati Ardakani Z, Arefi S, Sadri Ardakani H, Arabi M, Zarnani A, et al. A close look at natural and in vitro fertilization as well as the need for donated gametes in treatment of infertility. *Payesh*. 2007;6(4):307-21.
4. Hendriks S, Dondorp W, de Wert G, Hamer G, Reping S, Dancet EA. Potential consequences of clinical application of artificial gametes: a systematic review of stakeholder views. *Hum Reprod Update*. 2015;21(3):297-309.
5. Darbandi S, Darbandi M, Khorram Khorshid HR, Sadeghi MR, Agarwal A, Sengupta P, et al. Ooplasmic transfer in human oocytes: efficacy and concerns in assisted reproduction. *Reprod Biol Endocrinol*. 2017;15(1):77.
6. Tremayne S, Akhondi MM. Conceiving IVF in Iran. *Reprod Biomed Soc Online*. 2016;2:62-70.
7. Behjati Ardakani Z, Navabakhsh M, Ranjbar F, Akhondi MM, Mohseni Tabrizi A. Step-by-step decision-making process in third party assisted reproduction: a qualitative study. *Hum Fertil (Camb)*. 2022;25(3):487-98.

8. Abbasi-Shavazi MJ, Nasrabad HB, Ardekani ZB, Akhondi MM. Attitudes of infertile women towards gamete donation: a case study in Tehran. *J Reprod Infertil*. 2006;7(2):139-48.
9. Sheibani S. Whither kinship? new assisted reproduction technology practices, authoritative knowledge and relatedness-case studies from Iran. *Payesh*. 2007;6(4):299-306.
10. Golombok S. Parenting in new family forms. *Curr Opin Psychol*. 2017;15:76-80.
11. Silber SJ. Judaism and reproductive technology. *Cancer Treat Res*. 2010;156:471-80.
12. Sallam HN, Sallam NH. Religious aspects of assisted reproduction. *Facts Views Vis Obgyn*. 2016;8(1):33-48.
13. Al-Bar MA, Chamsi-Pasha H. Assisted reproductive technology: Islamic perspective. In: Al-Bar MA, Chamsi-Pasha H, editors. *Contemporary bioethics*. Germany: Springer; 2015. p. 173-86.
14. Inhorn MC. Making muslim babies: IVF and gamete donation in sunni versus shi'a islam. *Cult Med Psychiatry*. 2006;30(4):427-50.
15. Inhorn MC, Tremayne S. *Islam and assisted reproductive technologies*. 1st ed. New York: Berghahn Books; 2012. 346 p.
16. Al-Hasani S. Islamic consideration (in suni school) regarding bioethics and ART (especially oocyte and embryo donation) and the law in Germany. *Payesh*. 2007;6(4):379-84.
17. Serour GI, Dickens BM. Assisted reproduction developments in the islamic world. *Int J Gynecol Obstet*. 2001;74(2):187-93.
18. Safaiee SH. Failures of IRI "embryo donation act" based on a comparative study. *Payesh*. 2007;6(4):323-29.
19. Act of embryo donation. Islamic Parliament of Iran. Official Gazette No. 17033.. 2003; No.17033.
20. Executive by law of the Act of Embryo Donation. Official Gazette. 2005; No.17496.
21. Behjati-Ardakani Z, Karoubi MT, Milanifar A, Masrouri R, Akhondi MM. Embryo donation in Iranian legal system: a critical review. *J Reprod Infertil*. 2015;16(3):130-7.
22. Greenfield DA. Effects and outcomes of third-party reproduction: parents. *Fertil Steril*. 2015;104(3):520-4.
23. Katoozian N. [Civil law, public theory of obligations]. 8nd ed. Tehran; Mizan Publication; 2015. 912 p. Persian.
24. United Nations. General Assembly. Universal declaration of human rights. Department of State, United States of America. 1949;302(2):14-25.
25. An-Na'im AA. Human rights in the Arab world: a regional perspective. *Hum Rts Q*. 2001;23:701.
26. Al-Midani MA. Arab Charter Committee of Human Rights. *Elgar Encyclopedia of Human Rights*. Edward Elgar Publishing. 2022. p. 135-9.
27. Hill JL. What does it mean to be a "parent"? The claims of biology as the basis for parental rights. In *Parental rights and responsibilities*. 1nd ed. London: Routledge; 2017. p. 29-96.
28. Stumpf AE. Redefining mother: a legal matrix for new reproductive technologies. *Yale Law J*. 1986;96(1):187-208.
29. Shultz MM. Reproductive technology and intent-based parenthood: an opportunity for gender neutrality. *Wis L Rev*. 1990;1990(2):297-398.
30. Gheaus A. The right to parent one's biological baby. 2012.
31. Golombok S, Murray C, Brinsden P, Abdalla H. Social versus biological parenting: family functioning and the socioemotional development of children conceived by egg or sperm donation. *J Child Psychol Psychiatry*. 1999;40(4):519-27.
32. Schenker JG. Assisted reproduction practice: religious perspectives. *Reprod Biomed Online*. 2005;10(3):310-9.
33. Narayan U. Family Ties: Rethinking parental claims in the light of surrogacy and custody. In: Narayan U, Bartkowiak J, editors. *Having and raising children: Unconventional families, hard choices, and the social good*. Pennsylvania: Pennsylvania state university press; 1999. p. 65-86.
34. Klock SC, Greenfield DA. Parents' knowledge about the donors and their attitudes toward disclosure in oocyte donation. *Hum Reprod*. 2004;19(7):1575-9.