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## REVIEW

# Posthumous reproduction in Iranian law


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**Abstract** Posthumous reproduction (PHR) is the process by which assisted reproductive technology is used to establish pregnancy and produce genetic offspring following the death of a parent. There are different ethical and legal approaches towards this method of reproduction around the world. This paper will study the legality of PHR and its legal consequences for the family status of a child born by this technology according to Iranian law. This research uses the descriptive-analytical method to study Iranian legislation, the opinion of jurists and jurisconsults, and case law in the area of PHR. The only statute regarding assisted reproductive technology in Iranian law – the Embryo Donation Act 2003 – and the associated regulation contain no explicit provision on PHR. The subject is therefore very controversial among Iranian jurists and jurisconsults. This issue has also been the subject of divergent court decisions. This study shows that the current legislation is insufficient to address various issues raised by PHR, and there is a need for the legislature to provide legislative clarity. Although advocates of this technique use the approval of some jurisconsults (*fuqahâ*) as justification for the legal recognition of PHR during the *idda* period in Iranian law, some concerns regarding the practice, especially the child's best interests, support prohibition or at least restriction to specific, limited cases. 

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## Introduction

Posthumous reproduction (PHR) is the process by which assisted reproductive technology (ART) is used to establish pregnancy and produce genetic offspring following the death of a parent (Browne, 2016). There are three main types of PHR: (i) posthumous insemination with sperm of

the deceased husband; (ii) posthumous embryo transfer (transfer of an embryo conceived before the death of a parent); and (iii) posthumous use of the deceased mother's oocytes with the help of a surrogate mother.

The first infertility clinic in Iran was established in Yazd in 1989. Following scientific advances in infertility treatment and the growth of fertility clinics since the 1990s, questions and debates regarding the legitimacy and legality of differ-

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ent ART techniques and their effects on the legal parenthood of ART-born children have arisen. Faced with a declining population, the role of ART has become increasingly important in Iran, and following the state's latest pronatalist policies, ART has been acknowledged as a means to help achieve population growth (Tremayne and Akhondi, 2016).

A bill on the modality of embryo donation to infertile couples, signed by 111 members of the Islamic Consultative Assembly of Iran, was tabled on 10 October 2001. Following parliamentary debates and the Guardian Council's review of conformity of the bill with Iranian Constitution and Islamic principles, the Modality of Embryo Donation to Infertile Couples Act (henceforth, 'the 2003 Act') was finally adopted on 20 July 2003 (Official Journal of 20 August 2003 No. 17033), and came into force on 5 September 2003. The law became fully applicable later in 2005 following the adoption of a related regulation on 9 March 2005.

The 2003 Act – the first and only statute regulating ART in Iran – deals solely with the technique of embryo donation, and contains no express provision concerning other ART techniques, including PHR (Afshar and Bagheri, 2013). Due to a legislative gap in this area and deep controversy among Iranian jurisconsults and jurists, various procedures have emerged in medical centres, and several cases have been brought before the courts of justice, resulting in diverse decisions.

It is important to note that, unlike in Western culture where the law regulates only some sectors of behaviour, the influence of Islamic law (*Shari'a*) is far more extensive in the private, social, political and religious lives of believers. Each Shia believer has a religious duty to follow the rulings of one high-ranking source of emulation (*marja-e taqlid*). However, there is no supreme religious authority in Islamic law, which inevitably leads to the multiplication of interpretations and positions (Atighetchi, 2007), and a plurality of equally authoritative religious rulings, which can differ greatly from each other and vary from state law (Tappan, 2012).

Muslim bioethics are rich in thought, reflections and diversified positions, all of which have the intention of being legitimated by the sacred texts (Atighetchi, 2007). Different ethical theories have different approaches towards human reason and its substantive role in deriving legal-ethical decisions (Sachedina, 2009).

Diversity of opinions of Shia jurisconsults on the permissibility of in-vitro fertilization (IVF) and, more specifically, PHR persists, and a gap has opened up allowing room for manoeuvre by both medical practitioners and infertile patients to make choices on the most suitable use of ART as befits them (Tremayne, 2009; Tremayne and Akhondi, 2016).

This study aimed to identify the legal and judicial status of PHR in Iran. For this purpose, the legality of PHR and its legal consequences for the family status of a child born by this technology according to Iranian law were studied.

## Materials and methods

This qualitative study used the descriptive-analytical method to study Iranian legislation, opinions of jurists and jurisconsults, and case law in the area of PHR. Published literature sources, interviews (mostly face-to-face) and docu-

ments were used as data sources. Through visiting courts and medical centres and conducting interviews with judges, doctors and technicians, mainly in Tehran and Mashhad (the two most populated cities in Iran), this study aimed to further our understanding of the practical procedures available in fertility clinics and judicial authorities.

## Ethical considerations

Ethical principles were considered in searching and citing court cases and literature. Ethical approval for this research was granted by Shahid Beheshti University of Medical Sciences (Ref. IR.SBMU.RETECH.REC.1397.1372).

## Results

In Iran, prior to introduction of the 2003 Act, there was no specific statute on ART. Therefore, by virtue of Principle 167 of the Constitution, fertility clinics and courts referred to authoritative sources of Islamic law and opinions of jurisconsults (*fuqahâ*). According to Principle 167 of the Iranian Constitution:

The judge is bound to endeavor to judge each case on the basis of the codified law. In case of the absence of any such law, he has to deliver his judgement on the basis of authoritative Islamic sources and authentic *fatawa*. He, on the pretext of the silence of or deficiency of law in the matter, or its brevity or contradictory nature, cannot refrain from admitting and examining cases and delivering his judgement.

However, Iranian jurists and jurisconsults hold very diverse opinions on ART. Some, such as Ayatollahs Boroujerdi and Milani, go as far as prohibiting IVF with the husband's sperm, whereas others, such as Ayatollah Khamenei, allow all types of ART including sperm donation between family members (intrafamilial gamete donation).

The 2003 Act, its regulation (implementing decree) and other statutes contain no explicit provision on PHR. This Act, authorizing the donation of embryos to infertile couples, does not contain any condition regarding the vital status of the applicants at the time of transfer of the embryo. In addition, it does not specify the validity period of the court's approval during which the couple, or one of them in the event of the death of the other, may have the embryo implanted (Fadai, 2015).

Given the legislative silence, the issue is very controversial among Iranian jurists and jurisconsults, and has been the subject of divergent court decisions. Fertility clinics have different procedures and guidelines for providing medical services following the death of a spouse regarding storage/destruction of the deceased's gametes/embryos and PHR. Table 1 summarizes the legal, judicial and practical status of PHR in Iran.

## Discussion

To improve understanding of PHR in Iranian law, this article will discuss the legality of PHR and its legal consequences for the family status of a child born by this technology.

### Legality of PHR in Iranian law

There are diverse ethical and legal approaches towards PHR around the world (Inhorn and Tremayne, 2012; Ministère de la Justice, 2010; Sabatello, 2014). In Europe, PHR is legal in Belgium, Spain, England, Portugal, Greece and the Netherlands. In contrast, the practice is banned in Germany, France, Italy, Switzerland and Denmark (Ministère de la Justice, 2010). Among Muslim countries, PHR is banned in Turkey and Tunisia (Aouij-Mard, 2014; Oktay-Özdemir, 2014). Countries that permit PHR have different rules regarding access conditions, such as people qualified to apply (the deceased’s wife, parents, etc.), need for gamete provider’s consent, storage period for gametes and period during which PHR can be conducted, PHR with gamete donation, and the administrative or judicial procedure required.

The discussion below will cover academic and theoretical debates of Iranian jurists and jurisconsults concerning the legality of PHR, and cases of conducting this technique in practice.

#### Doctrinal debates on the legality of PHR

In order to answer the essential question of whether or not PHR is lawful, the debates and arguments of Iranian jurists and Islamic jurists (jurisconsults) focus mainly on the question of the validity of marriage following the death of one of the spouses, as existence of a marriage contract between the gamete suppliers is considered to be a paramount condition for the legality of PHR among the majority of Shia

jurisconsults. In cases where the marriage is considered non-existent, PHR is considered as gamete donation and thus falls within debates over the legitimacy of this technique.

Regarding the dissolution of marriage following the death of a spouse, Iranian jurists and jurisconsults have expressed three different opinions (Pouresmaeili et al., 2015; Sadri and Nabiniya, 2015):

- the marriage dissolves upon the death of a spouse (Professor Jafari-Langroudi and Ayatollah Mohsen Hakim hold this opinion); therefore, a child born by PHR is considered as a child born through sperm donation, which is forbidden by the majority of Shia jurisconsults;
- the marriage dissolves at the end of the *idda* period (waiting period, equal to 4 months and 10 days from the death of the husband); PHR is therefore lawful exclusively during this period; and
- the marriage persists after the death of a spouse and even after the *idda* period. Ayatollahs Mohammad Sadeq Rohani, Mohammad Yazdi and Sayyed Abolqasem Khomeini hold this opinion (Khomeini, 1991; Yazdi, 2001). Hence, considering the persistence of a marriage contract, or at least some of its effects, PHR is permitted even after this period. Some holders of this opinion insist more on continuity of certain consequences of marriage than the marriage contract itself.

The most important arguments given by jurisconsults regarding the continuation of a marital relationship follow-

Table 1 Status of posthumous reproduction (PHR) in Iran.

	Legality of PHR and conditions of access	Legal parenthood and inheritance right of the child
Islamic (Shia) law	There are three main opinions among Shia jurisconsults: <ul style="list-style-type: none"> <li>– PHR is absolutely prohibited (Ayatollah Mohsen Hakim)</li> <li>– PHR is allowed during the <i>Idda</i> period (many contemporary Iranian jurisconsults)</li> <li>– PHR is absolutely permitted, during or after the <i>Idda</i> period and even after the remarriage of the wife (Ayatollahs Yazdi and Ali Khamenei)</li> </ul>	There are three main opinions: <ul style="list-style-type: none"> <li>– Legitimate parenthood cannot be established, and the child is not attached to the deceased parent</li> <li>– Legitimate parenthood can be established but will not lead to inheritance rights (Ayatollahs Sistani and Khamenei).</li> <li>– The child has his/her parentage with respect to the deceased parent (father) with all its effects, including inheritance. (Ayatollahs Saanei and Fazel Lankarani)</li> </ul>
Statute	There is no express prohibition or permission	There is no specific provision. Legal maternity can be established easily with regard to the genetic mother by application of the general rules of legal maternity. However, legal paternity of the child born by PHR cannot be established with regard to the deceased father simply by application of the presumption of paternity; it would need to be established through a judicial procedure and a court decision
Case law	Case law is divided on the topic. Some courts have authorized the deceased’s wife and parents to proceed with infertility treatment (PHR)	The study of some available court decisions demonstrates the uncertainty and/or unwillingness of judges towards establishment of legal fatherhood of the child born by PHR despite their general acceptance of PHR as a technique of assisted reproduction
Fertility clinics	Some clinics do not provide treatment services for PHR and destroy the gametes/embryos after the gamete provider’s death (Novin Fertility Centre, Mashhad); some clinics require the court’s permission to provide medical services for PHR, and other clinics do not require such permission for conducting PHR	

ing the death of one of the spouses are as follows: (i) some verses from the *Qur'an* refer to a married woman whose husband is dead (widow) using the word 'wife' (*zawja*) (eg Surah Al-Baqara, Verses 234 and 240); and (ii) narrations (*hadiths*) which indicate that either spouse is allowed to bathe the dead body of the other spouse for the purpose of an Islamic funeral, the obligation of the husband to pay for his deceased wife's shroud, and the impossibility for the wife (widow) to remarry during the *idda* period (Safaei et al, 2017). Therefore, the principle of survival of the rules governing marriage until the end of the *idda* period is assumed, and all the effects of marriage with regard to spouses continue to exist during this period, except for those rules that are excluded by nature or a special reason in *shari'a* (eg sexual intercourse) (Rezania-Mo'alleem, 2010).

Among the Sunni jurisconsults, some consider that a marriage dissolves upon the death of a spouse, and some consider that a marital relationship persists until the end of the *idda* period. However, they unanimously believe that a marital relationship terminates after the *idda* period, and there is no reason to connect the wife to her deceased husband after this time (Rezania-Mo'alleem, 2010).

The *idda* period is defined by Article 1150 of the Iranian Civil Code (ICC):

*Idda* consists of a period during which a woman whose matrimonial bond has been dissolved cannot marry another man.

ICC, inspired by Islamic law, distinguishes two types of *idda*: (i) *idda* following divorce (*talaq*) or revocation of a marriage, which, in the case of permanent marriage, lasts for three consecutive menstrual periods or 3 months (Article 1151); and (ii) *idda* following the death of the husband, which lasts for 4 months and 10 days for both permanent and temporary marriages, unless the wife is pregnant in which case the *idda* period ends when the child is born, provided that the interval between the death of the husband and the birth of the child is longer than 4 months and 10 days (if not, the *idda* period is 4 months and 10 days) (Article 1154). *Idda* is a *shari'a* ruling that has been legislated for various reasons, mainly to provide an opportunity for reflection; settlement of dispute and even spousal reconciliation; to protect women's rights, especially in the case of marriage dissolution as a result of repudiation by the husband; and to prevent lineage mixture (Makarem-Shirazi, 1995). The most important justifications for *idda* ruling, its duration, and the rights and duties of spouses in this period are from the *Qur'an* (mainly Surah Al-Baqara, Verses 228 and 234; Surah Al-Talaq, Verses 1, 4 and 6).

Regarding Iranian law, Article 1120 of ICC lists cases of dissolution of marriage without mentioning the death of one of the spouses. According to Article 1120 of ICC:

Marriage contract may be dissolved by revocation, by divorce, or, in the case of a temporary marriage, by relinquishment of the remaining period.

However, in light of Articles 1150 and 1154 of ICC on the length of the *idda* period and the right of the wife to remarry after this period, it is considered that the legislature recognizes death as one reason for dissolution of a marriage. Most jurists believe that the legislature did not

expressly mention death in the law texts as it is implicitly assumed that this would be a reason for dissolution of a marriage.

In light of the views described above and debates regarding the legality of sperm donation (Conference Proceedings, 2014; Rezania-Mo'alleem, 2010), three different opinions on the legality of PHR are held among Iranian jurists and jurisconsults:

- PHR is absolutely prohibited. This view is based on debates over the dissolution of a marriage following the death of one of the spouses, or the welfare of the resulting child (Alizadeh and Omani-Samani, 2012; Katouzian, 2018).
- PHR is allowed during the *idda* period. Many contemporary Iranian jurisconsults hold this view. Ayatollahs Safi Golpaygani and Fazel-Lankarani permit PHR without specifying a deadline. Allameh Mohammad-Taghi Jafari, on the other hand, authorizes PHR during the *idda* period (Sadri and Nabiniya, 2015).
- PHR is absolutely permitted, during or after the *idda* period, and even after remarriage of the wife. The proponents of this view are those who consider that a marriage is not dissolved by the death of one spouse (Ayatollah Yazdi) (Yazdi, 2001), and those who authorize gamete donation unconditionally (Ayatollah Ali Khamenei) (Khamenei's Official Website, visited on 4 June 2019).

Among jurists, some consider that dissolution of a marriage following the death of one of the spouses does not pose a problem of legality, and the rules for ART with sperm donation can also apply here. This view is based, in particular, on the principle of freedom and self-decision, and considers PHR to be appropriate in the case of express or implied consent of the deceased parent for the use of their gametes or embryos after their death (Rasekh et al, 2012)

### Case studies

The uncertainty among jurists regarding PHR also exists in case law. Despite the legislative silence, cases of PHR take place, although rarely, in infertility clinics.

One should note that all clinics do not provide treatment services for PHR, and those that do provide PHR have no unified guidelines to perform this technique. In order to identify cases of PHR and understand the process by which it is performed, the author visited and interviewed the officials of two infertility treatment centres in Mashhad. The Head of Novin Fertility Centre, one of the best-known infertility treatment centres in Mashhad, announced that 'as soon as one of the spouses dies, the embryos are destroyed and discarded, so it is not possible to pursue infertility treatment' (interview conducted with Ms. Mahboob, Head of Novin Fertility Centre, Summer 2019). The Director of the Research Department at the Infertility Clinic of Razavi Hospital, after reviewing the clinic files, stated that 'our clinic has never received a request for posthumous reproduction. Generally, in the event of the death of one of the spouses, the other party withdraws from treatment' (interview conducted with Ms. Izanloo, IVF Ward, Razavi Hospital, Summer 2019).



There is no binding judicial decision, published officially by the judicial authorities, on PHR. However, two cases of requests for PHR, announced in journal articles and the subject of the first court decisions, are discussed below.

*Case A.* Following the death of his son, a man made a request to the infertility clinic to use the frozen embryos of his deceased son to give birth to his grandchild. As this case was new and unprecedented, the infertility clinic decided to refer the application to the court and applied for court approval to proceed with embryo transfer. The judge ruled thus on the question:

since the embryos were fertilized during the lifetime of the father, it is permissible to transfer the embryo to the uterus of a surrogate mother. The grandfather having the capacity of legal administrator, the child custody and the (paternal) authority on the child are conferred to him (Rasekh et al., 2012).

No information was provided on the wife of the deceased man, but it is assumed that she was also dead.

*Case B.* A couple underwent IVF in 2006 which resulted in the creation of 11 embryos, two of which had been implanted in the uterus of the wife without success. Following the sudden death of the husband, the wife asked the medical clinic to transfer the remaining embryos to her uterus. The medical clinic asked her to present a court approval for the posthumous embryo transfer. The court appointed the wife as the administrator for the embryos, and granted her approval. Once the child was born and for the purpose of establishing legal paternity, the mother made a claim in court and asked for the child's birth certificate to be issued by the National Organization for Civil Registration. This request was rejected and declared inadmissible because the proceedings were not brought in the forms required by law.

The judge reasoned his decision:

since no provision is provided for by the laws in force concerning the legal parenthood of this child and the consequences of such parenthood like succession, the impediment to marriage, etc., and that the legislation is silent on this subject, it would be necessary to refer to the authoritative Islamic sources or the opinions of jurisconsults (*Fatawi*). Although according to the majority opinion of jurisconsults the deceased ... and Mrs. ... are considered as [legal] father and mother of the child thus born, the mother as applicant and administrator of the embryo must present a request and bring evidence to obtain a favorable decision by the judge; the request is to validate the certificate established by the Institute of Royan and thus to prove the fact that the embryo was created by the gametes of the applicant and her deceased husband to establish the legal parenthood of the child with regard to the applicant and her deceased husband (Alizadeh and Omani-Samani, 2012).

These decisions demonstrate the Iranian judges' uncertainty and/or unwillingness towards establishment of legal fatherhood of a child born by PHR despite their general acceptance of PHR as an ART technique.

## Family status of a child born by PHR in Iranian law

Countries that authorize PHR have different rules regarding its effects on child parenthood and inheritance rights. In these countries, the child's legal parenthood with regard to the deceased father must generally be established through a court decision, and the presumption of paternity does not apply (Ministère de la Justice, 2010); this is the case in England, Belgium and The Netherlands. However, in Spanish and Greek law, paternity can be established by application of presumption of paternity without the need for a judicial procedure. Concerning the child's right to inherit, some countries, such as Greece, explicitly recognize this right and provide specific rules for the inheritance of children born by PHR (Rokas, 2016). The Netherlands does not provide any specific rules on this issue; as such, general rules of succession law are applicable. Some other countries, such as England, generally deny the child's right to inherit from the deceased parent, although they recognize the child's paternity.

In Iran, as discussed earlier, PHR is not regulated by legislative texts in terms of its legality and access conditions, or its effects on the family status of the resulting child. Given the legislative silence, jurists and courts refer to the general rules of legal parenthood and inheritance, authoritative sources of Islamic law and the opinions of contemporary Shiite jurisconsults on the matter (Principle 167 of the Constitution). The following section will examine the conditions for establishing legal parenthood and the issuance of a birth certificate for children born by PHR; and the consequences of such legal parenthood on child custody, paternal authority, child maintenance and inheritance.

### Legal parenthood and issuance of a birth certificate

Legal parenthood of a child born by PHR raises two main questions: (i) is such a child considered to be a legitimate child whose legal parenthood can be established with regard to his/her biological parents; and (ii) how can this parentage be established?

Regarding the first question, ICC distinguishes between children born (and conceived) in marriage (legitimate children) and children born (and conceived) out of marriage (illegitimate children). Concerning illegitimate children, Article 1167 of ICC provides that

'A child born as a result of fornication (*zena*) will not be attached to the fornicator (*zani*)'.

Iranian jurists and jurisconsults agree that PHR cannot be described as *zena*. However, two different opinions have been expressed by jurists concerning the scope of Article 1167 of ICC. According to the widely held opinion among Iranian jurists, based on a strict interpretation of Article 1167 of ICC, this article is the only exception to the provisions of legitimate parentage. As a result, in other cases, such as PHR or sperm donation, the child's parentage towards the biological parent should be considered to be legitimate.

Regarding the second question, according to ICC, the conditions for legitimate parentage are: (i) the existence of a marriage contract at the time of conception; and (ii) the consummation of marriage. The issue is whether these

two conditions are fulfilled in the case of PHR. Legal maternity can be established easily with regard to the genetic mother by application of the general rules of legal maternity (Articles 19 and 15 of the Civil Status Registration Act 1976). However, establishing legal paternity raises legal problems. As discussed previously, according to Iranian law, death is one of the causes of dissolution of marriage. In addition, as the 10-month period imposed by Article 1159 of ICC is often not respected, the establishment of legal fatherhood by application of the presumption of paternity will be impossible in the case of a child born through PHR.

With regard to a child born following the dissolution of a marriage (in the case of natural reproduction) and an application for the presumption of paternity, Article 1159 of ICC provides that:

A child born after the dissolution of marriage is attached to the husband provided that the mother has not yet remarried and that the interval between the dissolution of the marriage and the birth of the child is no more than 10 months, unless it is established that the interval between the date of intercourse and the date of birth has been less than 6 months or more than 10 months.

Article 1160 of ICC adds:

If the marriage is dissolved after matrimonial intercourse and the wife remarries and gives birth to a child, the child will be attached to the husband to whom the attachment of the child is possible according to the preceding Articles. In case the attachment of the child to both husbands would be possible according to the preceding Articles, the child is attached to the latter husband unless there are definite indications to the contrary.

According to the provisions mentioned above, legal paternity of a child born by PHR cannot be established with regard to a deceased father simply by virtue of law, but would need to be established through a judicial procedure and a court decision.

The General Legal Directorate of the judiciary, an advisory service within the judiciary whose opinions are purely advisory and not binding, adopted the same position and announced, in its advisory opinion of 05/10/1998 (N 7/3866), that:

the child born by artificial fertilization with the sperm of the husband is attached to the husband, whether the fertilization was made during the marriage, during the *idda* period or after the divorce and the *idda* period. In this case, the child is not illegitimate and her legal parenthood is established towards her mother and father (Gorgi et al., 2018).

This opinion relates to the case of divorce and not death of the husband; however, these two cases are similar in that they both dissolve the marriage.

Nevertheless, there are cases in which a judge has refused to establish the legal parenthood of a child with regard to a deceased father. In a case in Lorestan Province, following the death of the husband, the wife had a posthumous embryo transfer. Once the child was born, the wife encountered difficulties in establishing legal parentage, and the registrar of civil status refused to issue the child's

birth certificate. The wife brought a court action to establish legal parenthood of the child with respect to herself and her deceased husband. The judge dismissed her claim both at first instance and on appeal. The author heard this case in an interview in July 2017 with a magistrate at Tehran Court of Appeal, without having access to the official legal documents of the case and the text of the judgement.

It should be noted that establishing or contesting parenthood in cases of natural or artificial reproduction through modern genetic testing is not explicitly covered by statutes or enforceable court decisions. The issue is therefore controversial in the courts. Although some courts have admitted DNA testing as reliable scientific evidence in deciding paternity cases in the first instance, these judgements have often been rejected by the Supreme Court based on the argument that presumption of paternity (*Amare farash*) takes precedence over such scientific tests, particularly when more than 2 months has passed since the birth of the child, as this is the legal period available for the husband (presumed father) to contest paternity (ICC, Article 1162) (Ex. Supreme Court, Chamber 18, No 9309970907800260, 16 August 2014; Supreme Court, Chamber 8, No 9109970906801071, 20 October 2012).

#### Effects of established parenthood of a child born by PHR

If, according to the debates mentioned above, the legal parenthood of a child born by PHR could be established, the effects of such parenthood remain unclear. In the opinion of jurisconsults authorizing PHR, legitimate parenthood would be established with regard to the living parent (mother) with all its effects. However, two different opinions have been expressed concerning the parenthood of a child born by PHR regarding the deceased parent (father) and its effects:

- The child has parentage with respect to the deceased parent (father) with all the effects of parenthood, including inheritance. Ayatollah Saanei believes that PHR during the *idda* period is lawful, and the resulting child is attached to the biological parents with all the effects of parenthood (including inheritance) if embryo conception occurs before or after the father's death, provided that the father gave consent during his lifetime (Saanei, 2013). Ayatollah Fazel Lankarani also considers that the child is attached to the sperm provider with all the effects of parenthood (Sadri and Nabiniya, 2015).
- Legitimate parenthood will be established but will not lead to inheritance rights. This is the opinion of Ayatollahs Ali Sistani, Ali Khamenei (Pouresmaeili et al., 2015) and Mohammad Yazdi (Yazdi, 2001).

Ayatollah Yazdi explains the issue in his book as follows:

Here, the lineage is established because the lineage is subordinate to the person of the gamete owners and the state of being known of the two main components of the primary embryo of human formed in the uterus or laboratory tube. In this discussion, it should be noted that the issue of lineage is ascertained in this case, but the issue of inheritance cannot be recognized. The child born of fertilization of the deceased's sperm with his wife's egg in the womb or laboratory tube is the child

of the owners of these two gametes and they are considered as her parents, but this child does not inherit from the deceased parent [...] because by death and at the moment of separation of the soul of the person from his body, the relationship of ownership with all his assets is ceased and forcibly transferred to the heir at the time of death even to the fetus in the uterus. And it is assumed that this child does not exist even in the womb at the moment of death and her embryo is conceived after death (Yazdi, 2001).

Legislation does not provide a clear answer to this question. It is therefore necessary to refer to the general rules of parenthood and succession, as well as to valid sources of Islamic law and the opinions of jurisconsults. While certain effects of legal parenthood, such as child custody, paternal authority and child maintenance, are relatively less complicated to address, other effects, especially succession, pose serious legal problems.

#### Child custody and paternal authority

Once legal parenthood is established, determination of the custodian and the owner of authority over the child is obvious. According to the law, child custody is entrusted to the living parent after the death of the other parent (ICC, Article 1171). Paternal authority belongs to the paternal grandfather in the event of death of the father (ICC, Article 1181). Child maintenance is the duty of the father and the paternal grandfather. In their absence or in the event of their incapacity, the duty of maintenance transfers to the mother (ICC, Article 1199).

#### Inheritance

Article 861 of ICC recognizes kinship (blood relationship) as a valid reason for entitlement to inherit on an intestate estate. For the purpose of intestacy rules, it is legal parentage that is important. Therefore, it is necessary for the legal paternity of the child to be established with respect to the deceased father.

With regard to the qualities of beneficiaries of a succession, Article 875 of ICC specifies that:

the condition for inheritance is being alive at the time of the death of the deceased. If there is a fetus, it will inherit if it had been conceived at the time of the death and also is born alive even if it dies immediately after birth.

According to Article 876 of ICC:

where there is doubt as to aliveness at the time of birth, there will be no inheritance.

Article 877 of ICC provides that:

If there is a dispute as to the moment of conception, the legal presumptions provided (by law) for the establishment of parenthood shall be applied.

It is important to distinguish between the terms 'zygote', 'embryo' and 'fetus' which describe different stages of biological human development. In humans, the term 'embryo' is applied to the unborn child from the start of the second week after fertilization until the end of the eighth week

after fertilization. Formation of important body systems occurs during the embryonic period. From the ninth week after fertilization, the unborn child is called a 'fetus'. Growth and development occur during the fetal period (Moore, 1988; Miklavcic and Flaman, 2017).

In short, according to the majority opinion of the Shia jurisconsults, ICC sets two conditions for a fetus to inherit: (i) to have been conceived at the time of death of the deceased; and (ii) to be born alive (Pouresmaeili et al., 2015). Under Iranian law, effective legal personality begins at the birth of the child; as such, the child will benefit from all civil rights, including the right to inherit, provided that he/she is born alive, even if he/she dies immediately after birth (ICC, Article 957).

As such, it is necessary to distinguish between PHR with an embryo fertilized during the father's lifetime and posthumous fertilization. A child whose embryo was conceived after the death of the father is deprived of succession because of the lack of existence at the time of the father's death.

However, a child whose embryo was conceived before the death of the father may inherit as long as he/she is born alive, subject to the provisions of Article 1158 of ICC concerning the presumption of paternity:

Any child born during married life belongs to the husband provided that the interval between intercourse and the birth of the child is not less than 6 months and not more than 10 months.

However, some authors refuse the status of heir of the resulting child even when the embryo is conceived before death. This opinion is mainly based on the following arguments:

- Article 875 ICC speaks of the unborn child (in the womb of the mother) and not the embryo;
- difficulties raised about the share of the estate that the embryo is entitled to inherit; and
- the risk of abuse by the PHR applicant (usually the surviving wife) to benefit from inheritance (Alizadeh and Omani-Samani, 2012).

Regarding the inheritance share of an unborn child, Article 878 of ICC provides:

when there is a child to be born at the time of death of the deceased, who if born capable of inheriting, will exclude all other heirs or some of them from inheritance, the estate shall not be divided up until the state of the unborn child is determined. If the unborn infant will not exclude any of the other heirs from inheritance and they wish to distribute the estate, they must put aside a portion for the unborn child equal to the share of two sons born in that same class of heirs, and the portion of each of the heirs is provisionally allocated until the state of unborn child is determined.

If one accepts that a child born of PHR has the status of heir, it is necessary to appoint an administrator for the embryo, as is the case for a fetus in the case of natural reproduction. Under Articles 103–110 of the Non-Contentious Matters Act (NCMA), the court may appoint an

administrator (*Amin*; i.e. a trustworthy person, depositary or trustee) for management of the property of the unborn child involved in an inheritance to protect his/her inheritance rights.

According to Article 103 of NCMA, an administrator may be designated:

for the management of the inheritance that the fetus may receive in the estate of a deceased and where the fetus has no legal guardian or testamentary guardian [...].

Article 107 of NCMA provides that:

concerning the fetus, the public prosecutor and the close relatives of the fetus [...] may apply to the judge to appoint an administrator.

According to Article 109 of NCMA:

the mother of the fetus, if she is competent, has priority over the others and if she is not competent or if she does not accept it, relatives who are related or of alliance have priority over others.

## Conclusion

This study shows that current Iranian legislation is insufficient to address the various issues raised by PHR. It seems, therefore, necessary for the legislature to provide legislative clarity in terms of the legality of PHR and its consequences on the family status of a child born by this technology.

Precise and comprehensive legislative provisions can help to address legal and judicial uncertainty, provide clarity to fertility clinics, and reduce potential conflicts regarding legal parenthood and the right of the child to inherit.

While legal parenthood of the living parent (usually the mother) can be established easily by application of the general rules of legal parenthood, establishing parenthood with regard to the deceased parent (usually the father) raises legal problems. According to the majority opinion of Iranian jurisconsults, PHR using sperm of the deceased father is allowed during the *idda* period, and legal paternity of the child shall be established with regard to the deceased father in the case of posthumous embryo transfer (not posthumous insemination). However, this paternity does not necessarily give rise to all its consequences, as some authors do not recognize the right of the resulting child to inherit.

Advocates of PHR use the approval of some jurisconsults (*fuqahâ*) as justification for the legal recognition of PHR during the *idda* period in Iranian law. Nonetheless, some concerns regarding the practice, especially the child's best interests and the risk of hasty decision-making by the mother soon after the father's death, support its prohibition or at least restriction to specific, limited cases.

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