Ethical and Religious Aspects of Gamete and Embryo Donation and Legislation in Iran

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Abstract During recent decades, new assisted reproductive technologies (ARTs) have improved significantly, but their ethical, social, psychological, religious and legal aspects are blurred and need further research. New techniques using donor sperm or egg allow for third party involvement in the procreation process, which has created new hope for infertile couples. The corresponding clinical applications also raise new religious questions, which require appropriate interpretation in order to make their use possible, particularly in religious communities. In this paper, we discuss the most important ethical issues and the Islamic view of third party reproduction. Likewise, the current method of third party reproduction in Iran will be described, and the advantages and disadvantages of the Act of Embryo Donation to Infertile Spouses will be stated. Consideration of this outlook could generate inspiration in many Islamic countries.

Keywords Gamete donation · Infertility · Iran · Islam · Ethics

Introduction

Ethical debates in the field of gamete and embryo donation have existed since the earliest use of these reproductive techniques. Egg donation began in the early 1980s; the first pregnancy occurring via this technique was reported in Australia in 1983 (New York State Task Force on Life and the Law, 1998; Steinbock, 2004). The advances in assisted reproduction technologies (ARTs) enabled women to conceive without having sex. This also allowed for involvement of a third party which may
provide an oocyte, sperm, an embryo or a surrogate uterus. These new advancements in reproductive technology have propounded new ethical and legal issues. Given the success of ARTs in our country, necessary policies have been regulated and applied in recent years. In this manuscript, in addition to addressing the main ethical issues of gamete and embryo donation, we will mention the religious opinions of Islamic scholars and will discuss the Act of Embryo Donation to Infertile Spouses, which was ratified in 2003.

Ethical Issues

In third party reproduction, there are numerous ethical concerns about its indications, the recipients, donors, and children, the potential risks and safety, as well as payment options, commercialism or commodification, informed consent, confidentiality and disclosure, conflicts of interests, distributive justice, banking of the gametes and embryos, and the quality of services rendered. Some would like to limit the indications of ARTs to couples experiencing infertility or those that have a history of familial disorders, including serious genetic disorders. In contrast, others believe that single parents and even other interested parents should also be allowed to benefit from these techniques. The issue of when ART is indicated is surrounded by miscellaneous cultural and socio-economic debates.

In selecting desirable parents (the couples or single parents), assessment and screening of recipients is critical. Many factors are considered, including the age of parents, their past history and level of education, in addition to their ethnicity, religion, nationality, economic status, and ethical responsibility. Also, the welfare and financial facilities for the child-to-be is a major concern. Other issues related to the recipients include: discrimination in recipient selection, consent of both parents, avoiding coercion of women, knowledge of the parents about the donor and their attitude about disclosure, and future possible support.

A quantity of issues are related to the donors, including recruitment and screening of donors (primary screening, donation process, married and single donors, truthfulness), gamete or embryo selection, informed consent and consent of the spouse, financial incentives (compensation for costs with payment appropriate to the time, effort, risks, and discomfort of donor; avoiding exploitation or coercion of women), their attitude toward disclosure (known or anonymous gamete donation), gamete donation within families, and follow-up/future needs assessment.

Because there is a fundamental difference between ARTs and natural conception, we face various issues related to the children conceived. Selection of gametes or embryos with consideration of its sex, intelligence level, physical factors, and the debate of eugenics are all valid concerns. Also, disclosure to children (right to “know” and decision-making, preserving family integrity, the separation of children from their genetic parents and siblings), and the welfare of any child who may be born are major challenges to be addressed.

Likewise, the potential risks and safety of techniques in the process of gamete providing particularly in the ovum donation process, and the adverse effects of drugs, which could cause, as an example, Ovarian Hyper-stimulation Syndrome (OHSS), should be considered. In addition, the surgery itself and any long-term adverse effects- physical and psychological, should be observed.
In defining “payment”, we ought to make a distinction between “donors” and “vendors”. In this debate, the principles of respect for human life and dignity, and the intrinsic value of a ‘gift’ are the key arguments. There are essential religious and socio-cultural discussions in different communities occurring concerning these topics. There are also worries about the potential for coercion or exploitation, particularly exploitation of vulnerable people like the impoverished. Serious risks to the well being of the child and the potential to create a demand for spare embryos have also complicated the debate surrounding payment for egg donation and surrogacy.

Concerns about ethical issues of gamete and embryo donation are not limited to the above-mentioned topics. For example, there are critical points in the process of obtaining informed consent, which need to be addressed. Respect for autonomy, freedom of choice, and avoidance of coercion could be achieved and maintained by enhancing public awareness and providing accurate and unbiased information.

Confidentiality, disclosure and protection of privacy are key ethical issues accompanied by profound legal, religious, social and cultural questions. The right to autonomy and privacy of the recipients and the donors may face opposition by the right of the child to know his/her origin. In addition to these concerns, anonymity, disclosure of information relevant to health, consideration of disclosure issues before conception and later, and the possibility of donor tracking are suggested as topics to be considered and are currently discussed in different communities.

Certainly, conflicts of interests exist on many levels. These include conflicts between groups, such as donors and recipients, and parents and children, and also conflicts of interest surrounding certain topics like the rights of the child-to-be. In addition, conflicts of interests by the public, and commercial involvement should be addressed globally.

Distributive justice is another challenge which contains topics ranging from fair allocation of public resources to those who most need them, and possible burdens on the society, to cost-benefit considerations, resource scarcity and allocation, facility availability, and insurance coverage.

Banking of gametes and embryos offers a new chance for infertile parents. However, banking has a dual goal—in addition to being used for ART, it can also be used for research. Surrounding banking lies a multitude of ethical concerns about appropriate informed consent, commercialization of banks, use and storage of gametes from deceased donors, disposal of unused embryos, quality of services rendered, safety, precise supervision and monitoring, the ability to provide ongoing quality control of services, and prevention of transmission of serious diseases to both recipients and offspring (e.g., HIV infection).

**Islamic Viewpoints**

It is of critical importance for physicians involved in reproductive techniques to be familiar with religious perspectives related to reproductive health problems. Religion deeply affects the behaviours, practices, and policies in Muslim communities. Therefore, addressing the applications of ARTs from the Islamic view is one of the preliminary requirements for taking advantage of this technology.

First, we need to bear in mind that the term ‘kinship’ has different meanings in different cultural contexts, and gradually anthropologists have tried to replace it with
the broader term of ‘relatedness’ (Tremayne-Sheibani, 2006). It should also be mentioned that according to Islamic rulings, kinship would be ascertained through three ways—consanguinity (relationship by birth in the same family), marriage, and fostering (relationship by breast-feeding in infancy). Marrying close relatives (parents, siblings, offspring, aunts, uncles, grandparents, and foster brothers or sisters) is unlawful in Islam.

On the other hand, the bringing up of orphans is a great act of charity encouraged by Islamic teaching, but the lineage of the child should be determined by its natural parents (Albar, 1999). According to the original Al-Azhar Fatwa, adoption of orphans was prohibited throughout the Sunni Muslim world (Inhorn, 2006a). The only accepted way of fostering was by breast-feeding the child; the woman who fed the infant, along with her husband and their children, would then become the infant’s foster relatives.

It should be reminded that in addition to the holy Quran and Islamic law (Feqh), Islamic jurists take into account the ethical aspects, legal outcomes, public interests and social advisability for issuing decrees. Human safety and welfare, along with removing restrictions in emergency situations, are two important elements in the jurists’ decision-making process. According to the Islamic point of view, marriage and the family are God-ordained human institutions. Therefore, encouraging, supporting, preserving and strengthening family relationships, respecting the sanctity of marriage, and avoiding the break down of marriages are emphasized by divine law in order to promote the individual’s well being and insure the stability and welfare of society. Based on the above-mentioned principles, any action should be taken in order to support the institution of family. Thus, thinking of a remedy for infertile couples would be rewarding in Islam. In all schools of Islamic law, there is no religious objection to an infertile married couple pursuing any form of infertility treatment, including in vitro fertilization (IVF), surgical sperm retrieval, micro-assisted conception methods and embryo transfer (if the gametes belong to the husband and wife) (Husain, 2000; Schencher, 2005).

However, the new techniques of ARTs, particularly third party reproduction, have given birth to a new form of kinship, which encompasses biological, medical, legal, religious, ethical and moral aspects (Tremayne-Sheibani, 2006). The important, challenging issues in the field of third party reproduction consist of adultery, incest, and lack of biological descent. In Islam, reproduction outside of marriage is considered adultery (zina), which is strictly forbidden in Islam. The other troubling aspect of third-party donation is the potential for incest among the offspring of unknown donors (Inhorn, 2003, 2006a). Likewise, third-party donation confuses issues of kinship, descent, and inheritance. It destroys a child’s lineage (nasab) and leads to a ‘mixture of relations’ (Inhorn, 2003, 2006a).

A number of authoritative Fatwas, issued as early as 1980 from Egypt’s famed Al-Azhar University, suggest that IVF is permissible as long as it does not involve any form of third-party donation. However, since the late 1990s, divergences in opinion over third-party donation have occurred between Muslim clerics (Inhorn, 2006b). According to the shared opinion of most Muslim scholars, if ART is indicated for a married couple as a necessary line of treatment, it is permitted during the validity of marriage contract, with no mixing of genes (Al-Hasani, 2006; Serour, 1998, 2005). If the marriage contract has come to an end because of divorce or death of the husband, artificial reproduction cannot be performed on the female partner, even if using sperm from the former husband (Al-Hasani, 2006; Husain, 2000; Serour, 1998, 2005).
There should be no third party in the process of procreation, i.e., no donated sperm, ova or pre-embryo, and no surrogacy (Albar, 1999). Also, any union of gametes or donor sperm resulting in pregnancy outside a marital bond is strictly forbidden (Husain, 2000). Thus, oocyte and sperm donation are not allowed because mixing of the genes occurs (Al-Hasani, 2006; Serour, 1998). The basic concept of Islam is to avoid mixing genes, as Islam enjoins the purity of genes and heredity (Serour, 1998).

The religious decrees released by most Islamic jurists condemn the act of donor sperm insemination and equate it to committing adultery. Some also emphasise the importance of safeguarding lineage in Islam (Haji-Ahmad, 2003). Sperm cryopreservation is legal, and the frozen embryos are the property of the couple alone as long as the couple is still within the marriage contract (Gad El Hak & Serour, 2000; Haji-Ahmad, 2003; Serour, 2000a, 2005). This is because Islamic laws (Shariah) take into account of the rights of the child for it to be reared by two parents (Haji-Ahmad, 2003).

Surrogacy is not permitted for most Sunni jurists. It would be illegitimate because it involves a third party to which the husband was not legally married, and would be deemed as violating Islamic Laws (Haji-Ahmad, 2003). Surrogate motherhood was at one time allowed (Serour, 1998) in the case of bigamy (marriage of two wives or more). According to the Fatwa of the Fiqh council in 1984 (Serour, 2005), some jurists permitted IVF between the sperm from a husband and an egg that was from a legally married wife; this was then implanted into the legally married second wife (Haji-Ahmad, 2003; Husain, 2000). However, the council withdrew its approval of surrogacy in 1985 (Serour, 2000b, 2005; Serour, Aboulghar, & Mansour 1995). In spite of these rulings, there has been an ongoing debate among Sunni scholars on surrogacy. While some religious authorities felt that it could be permitted, others believed that it should not be approved (Serour, 2005).

The main points of the Islamic position on this issue, which Dr. Inhorn has appointed in her book, consist of (Inhorn, 2003, 2006a):

First, artificial insemination with the husband’s semen is allowed, and the resulting child is the legal offspring of the couple.
Second, in vitro fertilization of an egg from the wife with the sperm of her husband, and the transfer of the fertilized egg back to the uterus of the wife, is allowed.
Third, a third party donor is not acceptable, whether he or she is providing sperm, eggs, embryos, or a uterus. The use of a third party is tantamount to adultery (zina).
Fourth, adoption of a donor child from an illegitimate form of medically assisted conception is not allowed.
Fifth, if the marriage contract has come to an end because of divorce or death of the husband, medically assisted conception cannot be performed on the ex-wife, even if the sperm comes from the former husband.
Sixth, an excess number of embryos can be preserved by cryopreservation. The frozen embryos are the property of the couple alone.
Seventh, multifetal pregnancy reduction (i.e., selective abortion) is allowed if the prospect of carrying the pregnancy to viability is very small or if the health or life of the mother is in jeopardy.
Eighth, all forms of surrogacy are forbidden.
Ninth, establishment of sperm banks with “selective” semen threatens the existence of the family and the “race” and should be prevented (Inhorn, 2006a).
Most Shi’ite religious authorities support the majority Sunni view. Namely, they agree that third-party donation should be strictly prohibited (Inhorn, 2003). Nevertheless, one Fatwa has “opened” the way to third-party donation since 1999 (Inhorn, 2003). In that year, the Iranian jurist issued a Fatwa effectively permitting donor technology to be used (Khamanei, 2004). This Fatwa allowed third-party participation including egg donation, sperm donation and surrogacy (Serour, 2005). According to this Fatwa, as egg donation is not in and of itself legally forbidden, the newborn would be considered to be the child of the person who collected the sperm (i.e., the husband) and the egg donor, as well as the surrogate (i.e., infertile) mother (Inhorn, 2006a; Khamanei, 2004). Likewise, it is legally not forbidden to fertilize a woman’s egg with a sperm donor in and of itself, but the opposite gender should avoid touching or seeing the women or man (i.e., naked) (Inhorn, 2006a; Khamanei, 2004). With regard to both egg and sperm donation, the Iranian jurist stated that both the donors and the infertile parents must abide by the religious codes regarding parenting (Inhorn, 2003). However, the donor child can only receive an inheritance from the sperm or egg donor, as the infertile parents are considered akin to adoptive parents who cannot pass on their inheritance (Inhorn, 2003, 2006a). Thus, the ensuing Fatwas and laws make a clear distinction between the biological parent and the carrier parent in the case of gamete donation, and emphasize the priority of nature over nurture (Tremayne-Sheibani, 2006). Currently, there is one other Fatwa permitting egg donation (but not sperm donation) (Inhorn, 2006a).

In most Muslim countries, parenting of a donor child by a single mother is unlikely to be socially acceptable (Inhorn, 2006a). The welfare of the resulting child is a primary concern, and the existence of a father is regarded as an important aspect in qualifying for the treatment.

Gamete and Embryo Donation in Iran

On average, around 10–15% of couples in Iran are infertile. There have been major technological achievements in the area of infertility treatment in Iran, and infertile couples do not have any legal barriers to take advantage of these technologies (Abbasi-Shavazi, Razeghi, Behjati-Ardakani, & Akhondi, 2006). The population policies of the Iranian government, which won the UN population award in 1988 for their achievements in ‘family planning’, highlighted the fact that the programme was not just about the reduction of population but also about helping infertile couples have children (Hoodfar, 1995). Following this endorsement, there has been a rapid flourishing of new reproductive technologies in Iran during the past several years.

Religion remains the ultimate source of knowledge for those seeking treatment for infertility in Iran, and is so powerful to legitimizing the practice of ARTs and providing spiritual guidance. Medical knowledge, next to religion, is the most powerful factor in influencing the reproductive decisions that people make (Tremayne-Sheibani, 2006).

There has been a great emphasis placed on medical progress and medical ethics in recent decades in Iran (Larijani, Malek-Afzali, Zahedi, & Motevaseli, 2006; Larijani & Zahedi, 2006a, b; Larijani, Zahedi, & Malek-Afzali, 2005). Likewise, Islamic viewpoints about new technologies have been presented by religious scholars (Larijani & Zahedi, 2004; Larijani, Zahedi, & Taheri, 2004). Compilation of the National Ethical Guidelines in the fields of biomedical research (containing ethical guidelines for clinical trials,
research on minors, genetic research, gamete and embryo research, organ and tissue transplantation research, and research on animals) is one of the valuable activities accomplished in our country in recent years (http://mehr.tums.ac.ir/code.asp). The ever-increasing consideration of medical ethics has been accompanied by a paralleled rise in the number of published manuscripts (Akrami, Osati, Zahedi, & Raza, 2004; Larijani & Zahedi, 2006c; Larijani et al., 2006; Zali, Shahraz, & Borzabadi, 2002).

Third party reproduction is one of the new reproductive technologies flourishing in Iran, which require Islamic interpretation to make their use possible. Fortunately, religious leaders in Iran have shown remarkable open-mindedness and flexibility towards embracing innovations in science and technology, including the use of modern reproductive technologies (Khamanei, 2004). The religious ‘Fatwa’ and law are being decreed to legitimize the use of these technologies and to adapt to changes within an Islamic framework. The Act of Embryo Donation to Infertile Spouses (Table 1), which was ratified by the parliament in 2003, has paved the way for application of third party reproduction in Iran.

The executive bylaw of this Act was passed by the Cabinet Council in March of 2005. According to the bylaw, embryo donors should be married couples who are ethically and legally competent, healthy, demonstrate desirable IQ scores, are not affected by refractory diseases such as AIDS and hepatitis, and are not drug addicts. There was no mention of age of either donors or recipients in the act or its executive bylaw. The donor’s personal information will be recorded and kept confidential, and every effort should make to preserve donor privacy. Therefore, disclosure of the donor’s identity requires judicial process or a court order.

Table 1

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<th>Embryo donation to Infertile Spouses Act</th>
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<td><strong>Article 1</strong>: All specialized medical centers of infertility treatment shall be authorized to perform transfer of embryos fertilized in vitro to the uterus of barren women for whom (one or both the spouses) medical procedures of treatment prove unfruitful, only in compliance with the legal and religious laws and consent in writing of both the spouses donating the embryo.</td>
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<td><strong>Article 2</strong>: The application for embryo donation shall be made by both the wife and husband and submitted to the court, and the court shall issue the permit for this if the following retirements are fulfilled:</td>
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<td>a. The spouses are unable to produce offspring according to valid medical records and the wife is able to gestate the embryo physiologically.</td>
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<td>b. Both the spouses are ethically competent.</td>
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<td>c. None of the spouses are legally incompetent.</td>
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<td>d. None of the spouses are affected by refractory diseases.</td>
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<td>e. None of the spouses are drug addict.</td>
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<td>f. Both the spouses must have Iranian nationality.</td>
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<td><strong>Article 3</strong>: Duties and responsibilities of the spouses taking the embryo and the coming child would be the same as real parents and children in taking care, training, giving alimony, and respect.</td>
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<td><strong>Article 4</strong>: Dealing with the qualification of spouses applying for embryo donation shall be performed by Family Courts without complying with the civil procedure formalities and such spouses’ disqualification case may be reconsidered.</td>
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<td><strong>Article 5</strong>: The executive bylaw of this Act shall be prepared within 3 months by Ministry of Health and Medical Education in cooperation with Ministry of Justice and shall be passed by the Cabinet Council.</td>
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Embryo Donation to Infertile Spouses Act comprising five Articles was passed by the open session of the Islamic Parliament on Saturday, July 20, 2003 and was approved by the Council of Guardians on July 30, 2003.

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a Islamic Parliament, Office of Head of Parliament, Ref. 33704/ Aug. 05, 2003
Competency of recipient spouses must be approved by the court. The volition of the court is issued with the aim to preserve public regulation and perform justice, which encompasses high values in any judicial regime (Milani-Far, Shahbazi, Akhondi, & Behjati-Ardakani, 2006). The counselling and screening programs of donors and recipients particularly focus on the interests and welfare of the future children.

Furthermore, continuity of the lineage by use of donation from relatives in Iran is preferred (Tremayne-Sheibani, 2006).

The single women (unmarried, divorced, or widowed) could not become embryo recipients in Iran. In addition, donors and recipients must have the same religion. There should be no payment for the donation of embryos or gametes.

Conclusion and Comments

The effects of infertility on individuals, and its emotional, psychological and social consequences, are complex matters that are influenced by many variables. The emerging relationships and new forms of kinship may give rise to situations, which require moral, ethical and legal frameworks as well as their religious interpretation. It is for these reasons that not all infertile couples are using the new technologies available in Iran. Furthermore, their decisions to use these technologies are influenced by their own perceptions and expectations, and those of society (Abbasi-Shavazi et al., 2006).

It should be remind that although a consensus by physicians and religious leaders has paved the way for progress of third party-assisted reproduction in Iran, there are numerous ethical, legal, psychological, and socio-cultural issues which could have important influences on the application of these technologies. The issues of new forms of kinship, the importance of safeguarding lineage, the welfare of the resulting child, and questions over inheritance, would be the most important challenges to overcome. Some aspects of these issues were discussed at the Conference of Gamete and Embryo Donation in Infertility Treatment in Tehran in March of 2006 (http://www.avesina.org/Journals/Seminars/11.pdf). Moreover, in addition to regulation in the field of third party reproduction, appropriate approaches for managing its consequences are an absolute necessity.

Existing data suggest that public education about new treatment methods for infertility is necessary (Janani, Akbari, & Changavi, 2006). Providing appropriate information related to new treatment methods, laws, and religious edicts will increase public knowledge and change the stereotypical views of infertility. These changes could then influence infertile couples’ decisions concerning the use of gamete and embryo donation in infertility treatments (Abbasi-Shavazi et al., 2006). Professionals have recently begun emphasizing the importance of providing counselling to couples before beginning treatment in order to gain confidence about the process itself and its related risks.

Establishing national ethical guidelines in this field is necessary, considering the different aspects of the issue and the various consequences of these new technologies. In addition, an arranged schedule should be compiled in order to organize the payment relationship between the donor and recipient in a legal manner. This step could be useful for preventing trade markets from arising in the future.
One of the most important issues is confidentiality of the gamete donor and disclosure of gamete donation to the future child and others. Thus, registries should be protected by the strictest standards of confidentiality. Regarding cultural and social differences among various societies, it is not justifiable to propose a unique method for managing this issue. In order to facilitate this process and prevent probable ethical and legal problems, pretreatment counseling courses should be established for the gamete recipients to inform them of the different aspects of this issue.

As previously mentioned, in Iran it is forbidden for patients with hepatitis or HIV to donate gametes or embryos. However, these patients may volunteer to receive donated gametes or embryos due to infertility or in order to reduce the risk of transmitting the infection to their partner or child. ART and gamete or embryo donation can help them to have a healthy and uninfected baby. Therefore, this issue should be re-evaluated by policy makers.

Despite religious approval, the mentioned act is silent on such techniques as egg and sperm donation. These themes also require legitimization through new laws.

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References


