Assisted Reproductive Technologies in Islam with Special Reference to Twelver Shia

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1. Introduction

The author has been studied history of classical Islamic thought, i.e., Islamic theology, philosophy, and Sufism, and had an opportunity to translate and comment on al-Ghazali (d. 1111)'s *Book on the Manners of Marriage*, the twelfth book in his *Revival of Religious Sciences*. Based on this book, the author studied discussions of contraception, abortion and various bioethical problems in Islam [Aoyagi 2014, and so on]. Examining assisted reproductive technology (ART) in Sunnite Islam [青柳 (Aoyagi) 2015], the author had the perception that Twelver Shia develops more various and flexible discussions than those of Sunni Islam.

Contrary to Sunni, Shia approves of a unique marriage system, i.e., temporary marriage (*mut'ah*)¹, and this marriage system appears a characteristic of discussions of ART. Temporary marriage is a marriage contract under the conditions of a time period (some days, some years, and so on) and bride wealth, and it is not approved in Sunni. If a couple is united in a temporary marriage, fertilized eggs are regarded as belonging to a married couple, not an illicit couple, so artificial insemination and in vitro fertilization between a man and a woman not originally married are justified. Thanks to this marriage system, one can obtain gamete from a temporary marriage partner, avoiding adultery.

¹ As for Shiite temporary marriage in classical times, see Murata 1987, and that of modern times, see Haeri 1989. There are no discussions of ART in Haeri 1989.

In cases where either the wife or husband is infertile, temporary marriage is used to legitimize the third-party donation. If the wife is infertile, since Islam permits polygamy, her husband enters into a one-day marriage with the donor woman without any sexual contact taking place. The donor's egg is fertilized with the husband's sperm outside the womb and is implanted in the wife's womb. Should the husband be infertile, the couple can opt for temporary marriage in the opposite direction, with the wife divorcing her husband and nominally marrying the sperm donor for a day, then remarrying her husband. The donor's sperm and her egg are fertilized in vitro in the same way, and implanted in her womb [Tremayne 2006, 2].

Of course, not all Shia legal scholars admit this interpretation of ART using the third person's gamete and surrogacy. However, as discussing later in this article, considering that all most of Sunni legal scholars are oppose to donor's gamete and surrogacy, this difference of interpretation is an important difference between Sunni and Shia whether ART using donor's gamete and surrogacy are permitted or not.

Nonetheless, it is one-sided to emphasize temporary marriage as a characteristic of Shiite ART, because there are many Shia legal scholars who insist that temporary marriage is not necessarily needed in vitro fertilization using the third party's gamete². For Shia legal scholars, the separating point between whether temporary marriage is needed or not depends on whether the third party interventions are considered adultery or not. If one considers using the third party's gamete as adultery, temporary marriage is necessary for avoiding adultery; on the contrary, if one does not consider using the third party's gamete as adultery, temporary marriage is not necessary. Here appears an important problem, i.e., what is adultery. In this paper, the author will discuss opinions of Shia legal scholars who insist that temporary marriage is not needed because high rank scholars such as Khamenei and Sistani do not believe that temporary marriage is necessary.

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² Ayatollah Khamenei clearly stipulates in his fatwa on gamete donation that mut'a marriage is not required, for he believes zinā (adultery) requires a physical act of intercourse [Abbasi-Shavazi 2008, 6].

First, the author will summarize discussions of Sunni legal scholars on ART, and introduce representative Shia legal scholars' opinions. Then, the author will revise discussions of ART among Shia scholars referring to the population problem of the Iran Islamic republic.

2. ART in Sunni Islam: Jad al-Hagg's Opinion

On 23rd March 1980, Jad al-Haqq who would be Sheikh al-Azhar later (1982-96), presented a fatwa (legal answers for questions from ordinary Muslims) concerning ART. This fatwa presented from the Egyptian Fatwa Agency (Dār al-Iftā' al-Miṣrīyah) is the first fatwa which refers to artificial insemination and in vitro fertilization in Islamic world [*al-Fatāwā al-Islāmīyah*, Vol. 9, 3213–3228]. According to this fatwa, artificial insemination and in vitro fertilization between a husband and a wife is legal; however, surrogacy is illegal. Further, there is no room for the third person and the surrogate mother, and adultery is denied. After all, a blood relationship is considered as important³.

Let us examine Jad al-Haqq's fatwa. He enumerates possible combinations of artificial insemination and in vitro fertilization as follows [al-Fatāwā al-Islāmīyah, Vol. 9, 3215]⁴.

1. The husband's sperm is artificially transferred to his wife while they live together.

³ In the Islamic Middle East world, people consider blood relations (*nasab*) as important and they do not consider those who are not related by blood or who were born from a woman other than a wife as their family. Therefore, Islamic law prohibits an adopted son. Islamic law scholars regard third party's gamete donation as problematical, because it confuses blood relations, makes situations similar to adultery or incestuous relationships, and makes society unstable [村上 (Murakami) 2015, 3].

For an abridged English translation and commentaries on this fatwa, see Rispler-Chaim 1993, 21–24: Inhorn 2003, 275–279.

- 2. The sperm of a different man is transferred to a married woman whose husband has no sperm, or whose sperm is sterile.
- 3. The husband's sperm is used to fertilize the ovum of another woman; the fertilized ovum is then transferred to the uterus of his wife, who has no ova.
- 4. The ovum of the wife is fertilized by her husband's sperm outside the uterus (in vitro) and then, it is returned to the wife's uterus⁵ [Rispler-Chaim 1993, 21–22].

At first, Jad al-Haqq cites the wording of al-Ghazali concerning the right of having children [al-Fatāwā al-Islāmīyah, Vol. 9, 3216]⁶, and examines each case.

Case 1, in which the husband's sperm is artificially transferred to his wife, is permitted by most Muslim legalists. However, if such a transfer is not made exclusively between the married couple, $zin\bar{a}$ (fornication) is detected and due punishment has to be inflicted.

Case 2 and 3 are not acceptable under Islamic law, because they involve violation of the marriage contract and the *nasab* (blood relation) that it normally guarantees.

Case 4 is the recently popular test-tube baby method. Most Muslim jurists permit this technique, as long as the sperm is the husband's and the ovum is the wife's. No other combination is allowed [Rispler-Chaim 1993, 23–24].

Thus, we investigated Sunnite discussions of artificial insemination and in vitro fertilization according to Jad al-Haqq, and it is clear that ART is permitted under the condition of using gametes between a husband and a wife. It is forbidden to use

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Jad al-Haqq examines the case of a fertilized egg between married couples deposited in the uterus of a suitable animal and later returned to the wife's uterus, and he rejects this case.

⁶ According to al-Ghazali, there are five intensions in Islamic law; one's belief, oneself, intellect, descendant, property, and keeping this five fundamentals is public welfare [Mustasfā, Vol. 1, 286–287].

gametes of the third person because it is the same as adultery. Further, in the case of in vitro fertilization, fertilized eggs must be returned to a wife's uterus.

Of course, in Sunni, there is an opinion to forbid all artificial insemination and in vitro fertilization. According to the fatwa of Mahmud Shaltut who is former Sheikh al-Azhar (1956-63), we found an opinion which completely prohibited all artificial inseminations [Rispler-Chaim 1993, 23]. Further, Abd al-Halim Mahmud, former Sheikh al-Azhar (1973-78), prohibits all test-tube inseminations. He claims that a child born via a test-tube lacks a father and a mother, and lacks feelings and human warmth. Mahmud also resorts to a demographic argument, that there is no need to add to the already over-populated world with test-tube babies. He disqualifies all test-tube inseminations without differentiating between them, and without considering the humane problem of childless couples that the method is meant to address [Rispler-Chaim 1993, 24].

3. ART in Shiite Islam (1): Khamenei's Opinion

Many Shiite legal scholars support the Sunnite opinion concerning ART; however, in 1999, Ali Hoseini Khamenei (b. 1939)⁷ who is the supreme leader in the Iran Islamic Republic presented a fatwa which permits artificial insemination and in vitro fertilization between not only a husband and a wife but also between a non-marital couple [Abu-Rabia 2013, 58; Atighetchi 2007, 146]⁸. Let us examine the discussions about donors' sperm in Khamenei's *Questions and Answers in Islamic Law* which

He serves as the president of the Iran Islamic Republic 1981-89, and was elected as the second supreme leader on February 1990, after the death of Khomeini on June 1989.

All Muslims followed Shaykh Jad al-Haqq's fatwa until Ayatollah Khamenei's fatwa in 1999, after which the Shia diverged on issues of mut'a marriage, third-party assistance, and conception outside marriage. To understand this divergence, it is pertinent to note that unlike the sunnis of Ash'ari inspiration (Traditionalists), the Shia along with the Sunni Mu'tazila (who together constitute the Rationalists), claim that humanity was endowed with 'aql (intellect) and hence able to differentiate right from wrong, thus leading the way for innovative ijtihad [Mahmoud 2012, 74].

includes the fatwa in 1999. Khamenei permits in vitro fertilization between a husband and a wife, and also permits donor's sperm as follows.

Question: Is it permissible for a woman, whose husband is sterile, to be artificially inseminated with sperm from a non-mahram man (other than her husband), i.e., through placing the sperm in her womb?

Answer: In itself there is no legal impediment to inseminating a woman with the sperm of a non-mahram man. However, it is obligatory to avoid the preliminary steps which are haram, such as looking and touching. However, the born child in this way does not belong to the husband of the woman, rather to the person who donated the sperm and the woman whose egg and womb were used in the process [Ajwibah, al-Talqīḥ al-Ṣinā'ī; Khamenei 2005, 301–302].

According to Khamenei, it is permitted that a wife who has a husband is fertilized with a donor's sperm. In this occasion, she must not have a physical relationship with a donor so as to avoid fornication, so only artificial insemination and in vitro fertilization are permitted. Further, the child belongs to the possessors of the sperm and egg, so the mother is a wife, but the father is the donor of the sperm, and not her husband.

In Sunni, only fertilization between a husband and a wife is permitted; on the other hand, some Shiite scholars such as Khamenei permits fertilization of a donor's sperm or eggs. Of course, the prohibition of the donation of gametes (sperm and eggs) from persons who are extraneous to the married couple also prevails in the Shiite world. However, the Shiite positions are more complex and differ from one another, as well as at times being distant from the Sunni positions. The reason is historical and theological. Shiite Islam still considers open the possibility of a personal (but

⁹ In this fatwa, artificial insemination is questioned, but in vitro fertilization also does not have a physical relation, so it seems that in vitro fertilization is permitted.

qualified) interpretation of the Sacred Sources (*ijtihād*); this possibility often makes the Shiite positons more liberal (flexible) on many doctrinal and ethical questions compared to the Sunnite world [Atighetchi 2007, 148].

The opinions concerning donor sperm are complex and therefore insemination with donor sperm is forbidden in Sunni Islam, and most Shia authorities concur with this in line with the sixth Shia Imam Jaafar Sadiq (d. 765)'s hadith "The depositing of semen in a place reserved by divine law for the husband is forbidden." The exception to this is Khamenei, and he permits sperm donation based on his definition of fornication (zinā) which is different from that of Sunni Islam [Mahmoud 2012, 80]¹¹. Opinions concerning donor gametes differ whether one considers fornication as the physical relationship outside of legal marriage or the union of sperms and eggs between non marital couples without a physical relationship¹². Khamenei does not consider the union between sperms and eggs as fornication, so he thinks temporary marriage is not necessary.

As for surrogacy, Khamenei does not discuss this in his *Questions and Answers in Islamic Law*, so let us examine questions and answers about medical rules from

¹⁰ One of the reasons for the prohibition of donor sperm is emphasizing the paternal line.

Some senior Shia clerics like Ayatollahs Mohammad Shirazi, Mosawi Ardebili, Qommi, and Ayatollah Seyyed Mohammad Musawi Bojnurdi, in the case that the husband's infertility leads to difficulties in marriage, fertilization of the woman's egg with the sperm of a man other than her husband outside of the woman's body and then the implantation of the fertilized egg in the women's uterus is allowed as long as no forbidden act, such as gaze or touch, has taken place [Naef 2012, 164–165].

Naef summarizes answers of Shia scholars for the question that "Is it allowed to fertilize the wife with the sperm of a stranger, by placing the sperm in her womb?" Ayatollah Khamenei: "There is no problem as long as no forbidden act such as gaze or touch, has taken place." Ayatollah Mohammad Shirazi (d. 2000): "It is permissible with the consent of the husband and as long as no forbidden act has taken place." Ayatollah Mosawi Ardebili (b. 1926): "There is a problem to the placing of a stranger's sperm directly into a woman's uterus, but there is no problem to the fertilization of an egg outside of the womb and then implanting the embryo into the woman's uterus. [Naef 2012, 165]" Thus, Khamenei and Shirazi consider a physical relationship as adultery; on the other hand, Ardebili considers a physical relationship and union of sperm and egg in woman's uterus as adultery. Further, most Sunnites and some of Shiites consider the union of sperm and egg outside woman's uterus as adultery and forbid donor sperm in vitro fertilization.

Khamenei's official website¹³. At first, Khamenei says that in itself there is no legal impediment to inseminating a woman with the sperm of a non-maḥram man. Further Khamenei says that if an egg fertilized with the sperm of a non-maḥram man is placed within the womb of another woman, the child belongs to the man and woman whose sperm and egg were used. It is not considered as the child of the second woman and her husband and the child does not receive inheritance from them.

Here, Khamenei discusses a fertilized egg between a donor's sperm and a wife's egg. In *Questions and Answers in Islamic Law*, it is permitted to put a fertilized egg between a married couple or a husband's sperm and donor egg in his wife's womb, and it is permitted to put a fertilized egg between a married couple in the surrogate mother's womb.

Next, Khamenei says that it is permissible for a man whose wife does not have eggs, to fertilize an egg — donated by another woman — in a tube by his sperm and implant it in his wife's womb provided that the preliminary *ḥarām* (prohibited) steps are avoided.

We will summarize the above discussion, and the combination which Khamenei permits is as follows.

- 1. Fertilized egg between married couple → wife's womb
- 2. Fertilized egg between donor sperm and wife's egg \rightarrow wife's womb
- 3. Fertilized egg between donor sperm and wife's egg → surrogate mother's womb
- 4. Fertilized egg between husband sperm and donor egg → wife's womb
- 5. Fertilized egg between married couple → surrogate mother's womb
- 6. Fertilized egg between husband sperm and surrogate mother's egg → surrogate mother's womb

Thus, it is permitted not only a fertilized egg between married couple but also a

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¹³ http://www.leader.ir/langs/en/ FAQ, Medical Rules, IVF

fertilized egg of donor sperm or donor egg, and also surrogacy is permitted if a wife is not able to bear a child. There are no discussions about the case of transplantation of fertilized eggs between both donor sperm and donor egg into wife's womb.

The fatwa of Khamenei published in 1999 is epoch-making, because it permits donor sperm or donor egg. Further, he considers fornication as a physical relationship, so temporary marriage is not necessary in ART¹⁴. And he permits surrogacy in his official website; it seems that Khamenei's discussions of ART permits every means available to obtain a child¹⁵.

4. ART in Shiite Islam (2): Sistani's Opinion

On the other hand, the position of the fatwa of Ali Husayni Sistani (b. 1930) who is a Marja'a al-Taqlid (supreme authority of Shiite law)¹⁶ in Iraq is more conservative. We will analyze his fatwas about ART in his *Jurisprudence Made Easy* (published in 2000), which is published on his official website in Arabic and English. Fatwas in "Dialogue on miscellaneous issues 2" in *Jurisprudence Made Easy* are as follows [$Fat\bar{a}w\bar{a}$ S; Sistani a].

Q1: If I could move on and ask about artificial insemination: Suppose the sperm of a man was used to impregnate his wife's egg through some artificial means. Is it permissible?

A1: Yes, it is permissible.

Q2: Can the sperm of a man be used to impregnate the egg of a woman, other than

¹⁴ This removal of the need for such a marriage is significant for the practice of egg donation, not so much because of the difficulty of persuading an egg donor to undertake such a marriage, as due to the fact that egg donation very frequently occurs between sisters. In Islamic law, a man is forbidden from marrying two sisters simultaneously [Clarke 2006, 25–26].

¹⁵ The author will rewrite an article on ART tourism in Lebanon which is influenced by Shiism.

The original meaning is "Source of imitation," in Persian, "Marja'e Taqlid". It means a supreme authority of Twelver Shiite Islamic law in Iran and Iraq, and has many followers to his fatwas.

his wife?

A2: No, it is not permissible.

Q3: Is it permissible to fertilize the egg of a wife by the sperm of her husband in a test tube, and the fertilized egg is then implanted in the wife's womb?

A3: Yes, it is permissible.

Q4: Using the same technique, is it permissible to use the egg of another woman for fertilization, and then implantation in the womb of the man's wife?

A4: Yes, this too is permissible.

Q5: In such a case, to whom will the born child belong – to the natural mother or to the surrogate one?

A5: There are two courses of action. Whichever one is taken must be the deciding criterion.

Q6: Is it permissible to inseminate the egg of a woman with the sperm of a man other than her husband?

A6: This must be avoided (yanbaghī al-ijtināb 'an dhālika).

At first, Sistani permits artificial insemination and in vitro fertilization between a husband and a wife in questions 1 and 3. As for donor eggs, two cases are discussed and in question 2, he prohibits artificial insemination between husband's sperm and donor egg; that is to say, it is prohibited to conduct the artificial insemination of husband sperm in surrogate mother's womb. However, in question 4, he permits in vitro fertilization between husband's sperm and donor egg, and putting this fertilized egg into a wife's womb. The case of putting fertilized eggs from a married couple into a surrogate mother's womb and making her bear a child is not discussed.

As for the case of donor sperm and the wife's egg, in question 6, Sistani says that this must be avoided, i.e., he prohibits it. Further, we examine Sistani's opinion of Question 20 "artificial insemination" in *Method of Right Persons (Current Legal Issues*). Sistani says that it is not permissible to inseminate a woman with the sperm of a man other than her husband, irrespective of whether or not she was married [*Minhāj*,

no. 65; Sistani b, no. 56]. Thus, Sistani prohibits in vitro fertilization of wife's egg and donor sperm. The summary of Sistani's opinion is as follows.

- 1. Artificial insemination of husband's sperm and wife' egg (wife will give birth) ○
- 2. In vitro fertilized egg between married couple \rightarrow wife's womb (wife will give birth) \bigcirc
- 3. In vitro fertilized egg between husband's sperm and donor egg \rightarrow wife's womb (wife will give birth) \bigcirc
- 4. Artificial insemination of husband's sperm and donor egg → surrogate mother's womb (surrogate mother will give birth) ×
- 5. In vitro fertilized egg between donor sperm and wife' egg \rightarrow wife's womb (wife will give birth) \times

In Sistani's opinion, homologous artificial insemination and homologous in vitro fecundation are lawful. It is lawful to fecundate in vitro the seed of a husband with the ovules of a woman other than his wife in order to then implant the embryo in the uterus of his legitimate wife¹⁷. The contrary, however, is unlawful, the fecundation of the eggs of a woman with the sperm of a man other than her husband and then grafting the embryo into the uterus of the same woman [Atighetchi 2007, 151]. Sistani's interpretation permits artificial insemination and in vitro fertilization in condition to use gametes of a married couple or the wife's egg and donor sperm. This opinion prohibits sperm of a man other than a husband because of the importance of the paternal line, and it seems that Sistani's position is in the middle between some scholars such as Khamenei who permits the sperm of a man other than a husband and the majority of scholars who permits only artificial insemination and in vitro fertilization of a married couple¹⁸. A table of these three positions is as follows.



 $^{^{\}rm 17}$ There will arise a problem who is the mother.

Table 1. For and against of combinations of gametes in ART

	fertilized egg between married couple	fertilized egg between husband's sperm and donor egg	fertilized egg between donor sperm and wife's egg
Sunni and most of Shia	0	×	×
Part of Shia (Khamenei and so on)	0	0	0
Part of Shia (Sistani and so on)	0	0	×

A case in which the fertilized eggs from a married couple were implanted into the surrogate mother's womb and after which the surrogate mother gave birth is not discussed. So, we will examine the discussion on surrogacy in Sistani's *A Code of Practice for Muslims in the West*.

Question: In the West [more precisely, in Italy] an ovum of a woman was fertilized in the laboratory, then the fertilized egg was implanted in the womb of the mother; the fetus developed in and was born from the grandmother's womb. Is it permissible to implant a fetus [or the fertilized ovum] in its grandmother's womb? And who will be the child's mother according to the shari'a (Islamic law)?

Answer: It is difficult to consider it permissible in principle, even if we overlook the

¹⁸ Many Shi'ite ulama (sholars) do not agree with Khamanei's permissive fatwa on donor technologies. For example, Ayatollah Muhammad Husayn Fadlallah, Lebanon's most prominent Shi'ite religious figure, does not agree with Ayatollah Khamanei's permission of sperm donation, although he agrees with the permission of egg donation. Neither of them requires the use of mut'a marriages to solve the zina (adultery) issue [Clarke 2006; Inhorn 2006].

haram looking and touching that is involved in this kind of procedure. And if this process takes place and the child is born, then in determining who is to be considered the child's mother from the genealogical perspective — the genetic mother or the biological mother — there are two views. It is prudent to observe caution in regard to both women. [That is, fulfill the rights of mother in regard to both.] [Figh; Sistani c]

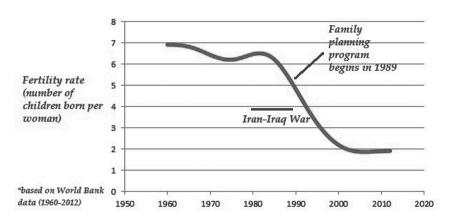
Here, the problem of surrogacy is discussed as a case seen in Europe. As for the case of implanting a fertilized egg from between a married couple into a wife's mother, and making her the surrogate mother, this is not forbidden, but it seems to be delicate, because the problem of who is the child's mother will occur. Surrogacy is not forbidden but should be avoided when a surrogate mother is the wife's mother using fertilized eggs between married couple.

To summarize Sistani's opinion, a donor egg is legal, but donor sperm is illegal¹⁹. Further, artificial insemination and in vitro fertilization between married couples are legal, but surrogacy is forbidden or avoided.

According to Clarke 2006, Ayatollahs 'Ali al-Sistani and Muhammad Sa'id al-Tabataba'i al-Hakim view third parity interventions as most likely unacceptable. Clarke draws on email correspondence and interview with representatives in Beirut, as well as published sources, al-Sistani, al-Fiqh lil-Mughtaribin (A Code of Practice for Muslims in the West), and some studies cite this Clarke's remark of Sistani's prohibition of third parity interventions ([Inhorn 2006; Abbasi-Shabvazi et al. 2006, 7], and so on.) However, in A Code of Practice for Muslims in the West, although prohibition of donor sperm is mentioned, there is no discussion about donor eggs. So we cannot affirm prohibition of donor egg in A Code of Practice for Muslims in the West. According to Question 4 in Jurisprudence Made Easy above mentioned, it is permissible to use the egg of another woman for fertilization, and then implantation in the womb of the man's wife, so we can say that Sistani permits donor eggs. Atighetchi 2007 also refers Jurisprudence Made Easy, and says that in Sistani's opinion, it is lawful to fecundate in vitro the seed of a husband with the ovules of a woman other than his wife [Atighetchi 2007, 151].

5. Transition of the Fertility Rate in the Iran Islamic Republic

In this chapter, we will examine the problem of population in Iran, seeing the graph of transition of the fertility rate. In Iran, the average number of children born per woman fell below two after 2002.



Graph 1. Transition of the fertility rate of the Iran Islamic Republic

http://iranprimer.usip.org/blog/2014/aug/13/baby-boom-baby-shortage Garrett 2014

We will trace the transition of Iran's policy of family planning²⁰. After the Iranian revolution in 1979, the fertility rate slightly increased because the expectation for the future urged for making big family. During the Iran-Iraq war in 1980-88, the population of Iran lost 300000, and as a result Iran went ahead with a plan to increase and multiply. After the war, the economy of Iran hanged low, and fear that there is not

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²⁰ For Iran's policy of family planning, see Garrett 2014.

enough employment corresponds to the growth of the population of young people necessitates the reduction of the fertility rate. Then, Iran introduced a family planning program in 1989, and the campaign "to give birth few and live in plenty" began. As a result, the fertility rate fell down as that of most advanced countries, so Iran had to switch policies to grow the population²¹.

In May 2014, Khamenei offered fourteen points of opinion to grow the population. Let us see the top three points of his opinion²².

The first point emphasizes "increasing the fertility rate to above replacement levels." On a global average, the replacement fertility level is 2.3 births per woman. For industrialized countries, this rate is slightly lower, while for developing countries, it can reach as high as 3.3 births. Iran's rate is currently below two.

Point two stresses "eliminating barriers to marriage" and "lowering the age of marriage and supporting young couples." High property prices have been a factor prompting many middle-class Iranians to put off marriage. Other factors include the struggling economy and the high rate of women studying in universities.

The third point requests that proper facilities be provided for mothers during

²¹ Thomas Erdbrink「イランの若者が子どもを欲しがらない理由 ("Reasons which Iranian young people do not want their children")」『NYタイムズ (NY Times)』 2014.7.27. http://digital.asahi.com/articles/ASG713W2ZG71ULPT002.html?_requesturl=articles%2FASG713W2ZG71ULPT002.html (The author consulted website on 28th July 2014, and could not view it on 6th November 2015.)

The fourth point calls for "reforming and completing public education" to emphasize the importance of the family. Point five calls for "promoting and institutionalizing an Islamic-Iranian lifestyle and opposing undesirable aspects of the Western lifestyle." Point six states the need for access to healthy living and food options as well as preventing societal ills such as addiction and pollution. The seventh point points to the need to take care of the elderly. Point eight addresses the issue of education to equip the population with marketable skills. Point nine addresses the need for proper distribution of space to relieve the "pressure on the population." Point ten calls for action to "retain and attract the population in the villages and borders." The need to "manage immigration to and from" Iran comes in point eleven. Point twelve stresses the importance of "encouraging Iranians outside of the country to be present and invest and to use their capacities and abilities." Point thirteen calls for strengthening a national identity and enhancing unity, "especially among those living along borders and outside of the country." Finally, point fourteen calls for constant monitoring of Iran's population policy.

pregnancy, insurance coverage for childbirth, and treatment for both male and female infertility.

Thus, the third point includes help for infertility, so it is possible that Khamenei is very positive for donor gametes and surrogacy in order to grow the population. However, Khamenei's fatwa permitting donor sperm was denied by the Iranian Parliament.

The Law on Embryo Donation was passed in 2003 in the Iranian Parliament and was approved by the Guardian Council, a religious watch-dog body that must endorse a bill before it becomes law. Even though the law is brief, it states clearly and succinctly who can and cannot donate and receive gametes and embryos. Egg donation is allowed, as long as the husband marries the egg donor temporarily, thereby ensuring that all three parties are married. Sperm donation, on the other hand, is legally forbidden, because a sperm donor cannot temporarily marry an already married woman whose husband is infertile. However, quite interestingly, embryo donation — which involves both sperm and egg from another couple — is allowed in order to overcome both male and female infertility. Because an embryo comes from a married couple and is given to another married couple, it is considered halal, or religiously permissible. [Abbasi-Shavazi 2008, 7].

As mentioned above, according to Khamenei's definition of fornication, artificial insemination and in vitro fertilization using donor sperm cannot be classified as fornication. Though Khamenei's fatwa on sperm donation was overruled by the Iranian parliament in 2003, and hence prohibited in Iran, its jurisdiction does not extend to the Twelver Shiite Muslims in Lebanon where sperm donation is freely available [Mahmud 2012, 81]. In the absence of effective enforcement of this new law, some IVF physicians in Iran—as well as in Shia-dominant Lebanon, which is closely following the Iranian lead—are capitalizing on the relaxed regulatory environment and the original permissive fatwa of Khamenei to practice all forms of gamete donation among their desperate infertile patients [Abbasi-Shavazi 2008, 81²³.

6. Conclusion

In this paper, the author takes up prominent legal scholars of both Sunni and Shia, and compares their opinions on ART philologically. In Islam, there is no consensus about ART, and artificial insemination and in vitro fertilization between only married couples are permitted in the position which considers blood relationship as important²⁴. On the other hand, from the position which considers avoiding fornication as important, artificial insemination and in vitro fertilization using donor gametes are permitted on the condition of avoiding fornication. In the latter case, there are various opinioins from the position that permits donor sperm or donor egg and surrogacy to the position that permits only donor egg and does not permit surrogacy. In general, it can be said that the interpretation of some Shiite scholars which does not restrict fertilization between married couples and permits using donor gametes in ART is more flexible than that of Sunnite scholars.

Last, the author takes up the population problem, and indicates that one of reasons that Khamenei presented the fatwa permitting donor gametes in 1999 may be derived from the population problem in Iran²⁵, though my demonstration is not enough. Of course the fundamental cause of the decrease of children seems to be the economic problem that married couples cannot raise their children because of their low incomes, and it is difficult to increase children by the governmental policy of ART only.

Shia is flexible in that each law scholar's opinions are respected, and following each opinion is permitted, even if the opinion is contrary to a law established in Parliament. In actual medical practice, medical workers and patients judge a right parent-children relationship and choose adequate medical treatment based on opinions of law scholars who they follow [村上 (Murakami) 2015, 5; Naef 2012; Tremayene 2006].

There are some legal scholars who do not permit artificial operation even between married couples as Abd al-Halim Mahmud as mentioned in the second chapter in this paper.

²⁵ According to Clarke, it seems that one of the reasons that Khamenei approves the third party's donation is not that Khamenei is 'liberal' or that he lacks knowledge of Islamic law; however, there is a possibility that Khamenei, as a realistic person doing business, tries to overcome the problem of infertility by modern medical technology [村上 (Murakami) 2015, 6; Clarke 2008, 42-43].

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However, on the background of the fatwa based on flexible interpretation, it seems that there is speculation of Iranian leaders who intend to increase the population, with consideration for married couples' wishes for having children. Although there is deeprooted opposition against Khamenei's fatwa, this fatwa has a great influence on Twelver Shiite Muslims in Iran and Lebanon, so we should pay attention to the population problem of Shiite Muslims in the future.

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