

The concept of Artificial Insemination in Islam

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Abstract:

Modern technologies have revolutionized the field of science. There is no field of human sphere which is not affected by science. On one side, it enables the people to understand the amplitudes of seas and universes while on the other side it is providing unlimited pleasures to them. In the past the parents who were deprived of children, spent their whole life in logging of their own children but now they are blessed with children by the help of Artificial Methods of Child birth. Artificial Insemination is one of them. It presents challenges to Muslims scholars and to those who are concerned with medical ethics. This article will highlight the need of Artificial Insemination, its kinds, its method, permissible methods and Islamic concept so that the people can get benefit from it.

Key words: Artificial fertilization, Donor fertilization, IVF, IUI, Artificial method of child birth, Assisted Reproductive Technology (ART)

Literature review:

Human curiosities gave birth too many innovations. The treatment of infertility was among them. Different techniques and methods were invented. The history show that at initial stage the artificial insemination was used in animals¹ which later on experienced for human in late 1700². Whereas, the debates started on its moral and social issues in US in 1909³ and in 1940s in Europe⁴. The 1st ever

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¹ Kramer Wendy, A Brief History of Donor Conception, https://www.huffpost.com/entry/a-brief-history-of-donor-conception_b_9814184

² Ibid

³ Ombelet, Willem, and Johan Van Robays. "Artificial insemination history: hurdles and milestones." *Facts, views & vision in ObGyn* 7, no. 2 (2015): 137

⁴ Ibid

research paper was published in 1962 entitled, "Intrauterine Insemination"⁵. Since then it became popular method to cure the infertility. First of all the husbands' sperms were used but when they were no avail in some cases the doctors used the donors' sperms⁶.

Finally it lead to the establishment of sperm banks in 1964 in USA and Tokyo, Japan⁷. This technique is not useful for every infertile couples, therefore, further research is required to improve it with modern methods along with the views of updated arguments of religious scholars in future.

Need of Artificial Insemination:

In third world countries like Pakistan people give much importance to the children and those parents having no children, are looked down upon by other people. Even the members of their families humiliate them. Now and again, they pinch and tease them to such an extent that they become psychological patients. Artificial Insemination comes in forefront in the disguise of blessing to those wretched couples.

The infertile males having small quantity of sperms which have no strength to move to the cervix and then into the fallopian tubes⁸ may avail this process and conceive their child. The females having "Unreceptive Cervical Mucus" can also get benefits from artificial insemination. Within such cases female' mucus nearby cervix is unreceptive to sperm and prohibits their entrance to uterus and fallopian tubes.

This method permits sperms to omit the cervical mucus entirely.⁹ And it is also helpful to those women who have least to mild endometriosis. Sometime cells, usually find into lining of the uterus (womb) start growing in other parts of reproductive system, which may result in infertility.¹⁰ This method is also suggested by the doctors, when they cannot determine the reason of the infertility of couple.¹¹

⁵ Cohen, M. R. "Intrauterine insemination." *International journal of fertility* 7 (1962): 235-240

⁶ <https://www.britannica.com/science/artificial-insemination>

⁷ Heineman, Kenneth J. "David Lance Goines. *The Free Speech Movement: Coming of Age in the 1960s*. Berkeley, Calif.: Ten Speed Press, 1993. Pp. 767. \$27.95." *History of Education Quarterly* 35, no. 1 (1995): 692

⁸ Murray, Sharon Smith, and Emily Slone McKinney. *Foundations of maternal-newborn and women's health nursing-e-book*. Elsevier Health Sciences, 2014.p 705

⁹ Mathis Charlotte E Grayson MD, *Artificial Insemination*, [http:// www.webmid.com](http://www.webmid.com)

¹⁰ Meletis, Chris D. *Enhancing Fertility: A Couple's Guide to Natural Approaches*. ReadHowYouWant. com, 2010.

¹¹ Ibid

History and back ground of Artificial Insemination:

The Artificial insemination is not a new idea. Its concept was found in Arabs in 1322. They used it successfully in mares.¹² While unofficial history show that an attempt was made to inseminate a woman by Henry IV.¹³ The first ever recorded experiment was made in late 1700 to impregnate human (woman) by John Hunter. He used the sperm of her husband for the process.¹⁴ This concept got its way to US, where Dr. J. Marion Sims conducted 55 cases of inseminations in North Carolina.¹⁵ The American doctor William Pancoast took a new step. He impregnates a woman by the donor's sperm without letting the patient.¹⁶ This process was also done by private clinics but secretly by 1940-1950. It got fame in US to such an extent that in 1951 about 20,000 children were conceived.¹⁷

In 1970 the concept of sperms bank was introduced and commercialized. Soon it reached to Australia where the first ever baby "Zoe Leyland" was produced by frozen embryo. Later on this technique was adopted by elderly women for example in 1996 a 63 years old woman conceived a child by donated egg in California and in 1997 a 65 years old woman benefit from it and gave birth by donated eggs.¹⁸

This method of treatment also reached in Pakistan with the passage of time. Dr. Farooq Nasim Bhatti, one of the Pakistani doctors established his fertility centers in Lahore and Faisalabad in 1998. He produced first baby through IUI in early 2000.¹⁹ Now a days this method has become popular in about all the major cities of Pakistan.

Kinds of Artificial Insemination:

There are three kinds of Artificial Insemination;

Sub Zonal Insemination (SUZI)

It is the variation of ICSI (Intracytoplasmic sperm injection). In this method male's sperm is injected into sub-zonal area rather than in cytoplasm of the ovum.²⁰

¹² Kramer Wendy, A Brief History of Donor Conception, https://www.huffpost.com/entry/a-brief-history-of-donor-conception_b_9814184

¹³ Ibid

¹⁴ <https://www.britannica.com/science/artificial-insemination>

¹⁵ Kramer Wendy, A Brief History of Donor Conception, https://www.huffpost.com/entry/a-brief-history-of-donor-conception_b_9814184

¹⁶ <https://www.britannica.com/science/artificial-insemination>

¹⁷ Ibid

¹⁸ Ibid

¹⁹ Treatment of Infertility by IUI Method, <http://manhealth.com.pk/iui-treatment-in-lahore/>

²⁰ Chohan, M. Arshad, Fundamentals of Gynecology, (Lahore: Mar Publications, 2000), p.140

Intra Uterine Insemination (IUI)

In this method ovulation is induced by one of the methods mentioned above and follicular growth is monitored with ultrasound. When leading follicle reaches 18-25 mm size with two other follicles more than 14 mm, an injection of hcg 5000 iu (Human chorionic gonadotropin) is given. Husband’s semen is collected after an abstinence of 3 days, 36-50 hours after injection of hcg. Semen is prepared in laboratory by swim up technique and injected high into uterine cavity with the help of a fine catheter.²¹ This technique is very simple and it requires minimal manipulation. And no invasive procedure is involved in it. It costs much less than IVF, but its success rate is lower than IVF.²²

Intra cervical Insemination (ICI)

In this method doctors inject the sperm of husband in the cervix of wife instead of uterus.²³

Methods of Artificial Insemination:

Before starting this process the doctor first of all diagnoses the cause of infertility. Then he analyzes the male’s sperm. If he finds them suitable for insemination then he takes the blood test and ultrasound of the woman to determine if she is ovulating normally. If he finds the irregular ovulation patterns, then he uses medicine inducing ovulation before artificial insemination.²⁴ After it, he advises the husband to avoid sexual intercourse for 2 to 5 days in advance to make sure the maximum sperms count. Then he gets the sperm using any method (discuss in next point) (it is necessary to “wash” the sperm in the lab within an hour of ejaculation) this procedure of “washing sperm” enhances possibility of fertilization and removes chemicals in semen which result in anxiety for females. It liquefies sperms at room temperature for thirty minutes. After it, a risk-free chemical is mixed to separate the most active sperm. The best sperm is collected by using a centrifuge. After that the sperm is placed in a thin tube called a catheter.²⁵ Finally, it is implanted in female’s reproductive tract.²⁶ Here the baby completes his/her period in a normal way.

Methods of acquiring sperms:

For acquiring sperms any one of the following methods are used;

²¹ Chohan, M. Arshad, *Fundamentals of Gynecology*, (Lahore: Mar Publications, 2000), p.140

²² *Ibid*, p.141

²³ *Artificial Insemination*, <http://www.yourtotalhealth.ivillage.com>

²⁴ *Ibid*

²⁵ Malpani, Anirudha. *How to have a baby: overcoming infertility*. Malpani Infertility Clinic, 2003.p,135

²⁶ *Artificial Insemination*, <http://www.yourtotalhealth.ivillage.com>

- a: Doctor advises the patient for masturbation.²⁷
- b: During the sexual intercourse the patient is asked for exterior ejaculation and store sperm in any pot and gives to the doctor.
- c: Patient is advised to use condom during the sexual intercourse and ejaculate sperm in it. After it he takes it to his doctor.²⁸
- d: The doctor uses the PESA (percutaneous epididymal sperm aspiration) technique to the patient with obstructive azoospermia (duct blockage or absence of the vas deferens in which the sperm is sucked out from the epididymis by puncturing it with a fine needle²⁹
- e: Rarely, the doctor uses MESA (Microepididymal sperm aspiration) technique. In this method the doctor uses microsurgery to find epididymal sperms.³⁰
- f: Some doctors place unipolar rectal electrodes around the base of the penis and 60-cycle A C current at low voltage is given to cause erection and ejaculation.³¹

Permissible methods of acquiring sperms:

For the process of Artificial Insemination, the first stage is of acquisition of sperms. Different methods of this process have already been discussed above. We will focus the valid method of acquiring sperms.

There is divergence among the scholars in the first method "Masturbation". Majority of the scholars acknowledge this method contraband. But in constraint and for conceiving a child they are agreed legality of this method. Mr. Vardit narrates; "This method is permitted even if the husband has to masturbate in order to collect the seed in to a vessel, although Islamic law in general is not supportive of free masturbation."³²

While the second method "Exterior ejaculation and storing sperms in pot" is better and allow in sharia. The third method "Use of condom" is preferable and safe.³³ The "D" Uses the PESA (Percutaneous epididymis sperm aspiration) technique. And "E" Uses MESA (Microepididymal sperm aspiration) technique

²⁷ Brahler, E. "Body experience: The subjective dimension of psyche and soma." (1988): 62-73.

²⁸ Lahoree, Mubasher Hussain, Jadid Faqhe masaial kitab-o- sunnat key roshne main, (Lahore: Maktaba Qadosia), p.50

²⁹ Ibid

³⁰ Coward, Robert M., and Jesse N. Mills. "A step-by-step guide to office-based sperm retrieval for obstructive azoospermia." *Translational andrology and urology* 6, no. 4 (2017): 730.

³¹ Martin, David E., Harold Warner, Theresa L. Crenshaw, Roger T. Crenshaw, Charles E. Shapiro, and Inder Perakash. "Initiation of erection and semen release by rectal probe electrostimulation (RPE)." *The Journal of urology* 129, no. 3 (1983): 637-642.

³² Rispler-chaim, Vardit, *Islamic medical Ethics in the Twentieth Century*, Brill, 1993, p.24

³³ Lahoree, Mubasher Hussain, Jadid Faqhe masaial kitab-o-sunnat key roshne main, (Lahore: Maktaba Qadosia), p.50

are painful for the patient while in “F” (Electricity) is used though in low voltage, is necessary to avoid until unless the other methods are no avail.

Retrieval of Egg:

Egg is an integral part of fertilization. So doctors first of all manage to retrieve the egg from the uterus. For this purpose they use the following methods;

Ultrasound-guided aspiration

In this process the Ultrasound probe is inserted through the vagina which emits high frequency sound waves which are translated into images of the pelvic organs and displayed on the monitor and that the mature follicles can be seen as black bubbles on the screen. The doctors guide a needle through the vagina into each mature follicle. The follicular fluid containing the egg then sucked out through the needle into a test tube and all the follicles are aspirated one by one.³⁴

Laparoscopy

This procedure is carried out under general anesthetic. The eggs are retrieved from their follicles using a very fine suction needle. Now a day doctors avoid using this method because the vaginal-ultrasound guided methods is much quicker, easier and safer.³⁵

T.U.D.O.R: (Trans-uesical, ultrasound directed oocyte Recovery)

This is an outpatient procedure performed under a local anesthetic. In this method suction probe is guided by ultrasound control through the bladder. This technique also has the advantage of being able to retrieve eggs from an inaccessible ovary even if it is covered by adhesions.³⁶

Intra Cytoplasm Sperm Injection (ICSI)

For making artificial insemination more successful the scientist introduced a new assisted reproductive technique named as ICSI.³⁷ In this process the doctors first of all select the healthiest sperm and inject a single sperm of a male using micromanipulation system³⁸ and it develop in the cytoplasm of an egg.³⁹ The notable thing is that in this process the individual sperm is injected into individual eggs.⁴⁰

³⁴ Test Tube Baby- In Vitro Fertilization (IVF) , <http://www.seasonsindia.com>)

³⁵ Ibid

³⁶ Ibid

³⁷ Allahbadia, Gautam N., and Goral Gandhi. *The Art & Science of Assisted Reproductive Techniques (ART)*. (JP Medical Ltd, 2017).

³⁸ Kandeel, Fouad R., ed. *Male reproductive dysfunction: pathophysiology and treatment*. (CRC Press, 2007),p.432

³⁹ Sapp, Jan. *Genesis: the evolution of biology*, (2003: Oxford: Oxford University Press), p.104

⁴⁰ Macintosh, Kerry Lynn. *Illegal beings: human clones and the law*. (Cambridge University Press, 2005), p.13

Process:

In the normal routine of life the ovary produces one egg in every month. But in ICSI method doctor recommends powerful drugs for retrieving multiple eggs. (Human Menopausal gonadotropin HMG-injections).⁴¹ After that the doctor punches a large needle through her vaginal wall to siphon⁴² or abdomen⁴³ and one or more fully developed egg⁴⁴ cells are sucked from a woman’s ovaries. All this process is done or completed under vaginal ultrasound guidance.⁴⁵

After retrieving eggs the doctor removed the cumulus cells known as the cumulus cells,⁴⁶ which surrounded the egg in normal circumstances. This removal is done by repeated passages of the oocyte cumulus corona complex through fine pipettes and by treating them with a chemical called hyaluronidase so that these cells are stripped off.⁴⁷ These are examined carefully and the eggs, which are matured, separated from the other eggs. After that the doctor manages the sperms of husband by different ways mentioned above in the IVF. Then these eggs are placed in a dish or tube with sperm of her husband or donor and kept warm for about 60 hours.⁴⁸

When sperm fertilized the egg then it was inserted in woman’s womb. This modern technique is used when sperms of any person are not able to penetrate the egg or they are very low in numbers. It is also proving an immense valuable in the management of male infertility.⁴⁹

Islamic concept about Artificial Insemination:

Islam is the last and complete religion hence it addresses all the issues. Even modern issues are also solved by it. Initially in the Muslims world “Assisted reproductive” technologies were not allowed because of the many reservations for example in “Libyan Penal Code 1972” it was concluded that;

- (i) It can be used against the principles laid by Shariah.
- (ii) The sterility can be solved by polygamy.

⁴¹ Malpan, Aniruddha ,Test Tube Babies- IVF & GIFT, <http://www.infertilitybooks.com>

⁴² Macintosh, Kerry Lynn. *Illegal beings: human clones and the law.* (Cambridge University Press, 2005), p.12-13

⁴³ Beckett, Brian Samuel. *Biology: a modern introduction.*(USA: Oxford University Press, 1986), p.136

⁴⁴ Ibid

⁴⁵ Malpan, Aniruddha ,Test Tube Babies- IVF & GIFT, <http://www.infertilitybooks.com>

⁴⁶ Ibid

⁴⁷ Ibid

⁴⁸ Beckett, Brian Samuel. *Biology: a modern introduction.* (USA: Oxford University Press, 1986) ,p.136

⁴⁹ Edward & Steptoe, “ In vitro fertilization in India <http://www.ias.ac.in/currsci/Jan25004/25>

- (iii) The infertility and sterility is due to the will of Allah.
- (iv) The doctors involved in this process observe those body parts of woman which are allowed to see only by husband.⁵⁰

Some other scholar did not allowed on the ground that observation proved that in the west, it has been done beyond the inseminations of husband and wife⁵¹. Abd al-Halim Mehmud, Sheikh of al-Azhar also outlawed IVF from 1973 to 1978. He said ' "A child obtained by IVF, does not have a father and mother and human warmth in growing up."⁵² In 1960, M.J.Mughniyyah, a Lebanese Shiet Sheikh, issued a fatwa' "Artificial fecundation is haram and no Muslim may come out in its favor."⁵³

But with the passage of time, the scholars studied this issue minutely and were agreed to allow its usage. They present this Hadith of prophet (PBUH) concerned to the medical treatment.

⁵⁴عن أبي هريرة رضي الله عنه عن النبي صلى الله عليه و سلم قال (ما أنزل الله داء إلا أنزل له شفاء)

"Hazrat Abu Hurairah (R.Allah) narrated that the Messenger of Allah (PBUH) said, "There is no disease that Allah has sent down but He also has sent down its treatment"

They said that infertility is a disease so it can be cured by available treatment under certain circumstances e.g. if husband's sperms are used for it then there is no harm in it. Arshad khan wrote in his book, "The artificial insemination procedure is considered acceptable in Islam only if the sperm donor is recipient's husband. Artificial insemination is permitted while a valid marriage contract exists between the donor and the receipt"⁵⁵ Islam gives rights to the husband and wife to become parents. It does not stop them to use the procedure of intercourse or medical means⁵⁶ if husband is not able to deposit the sperms in wife's genital tract. But if the husband is medical fit then he cannot benefit this technique. Furthermore by this technique the sperms other than husband cannot be used, as it is great sin. Grand Imam of Azhar, Sheikh Mahmoud Shaltut, states, "It is a

⁵⁰ Atighetchi, Dariusch. Islamic bioethics: problems and perspectives. Vol. 31. Dordrecht: Springer, 2006.p135

⁵¹ Ibid.pp.135-136

⁵² Ibid.p.136

⁵³ Ibid

⁵⁴ Al-Bukhari, Muhammad. Sahih al-Bukhari. (Ryadith: Darussalam, 1999). H. No. 5354

⁵⁵Khan, Arshad. Islam, Muslims, and America: Understanding the basis of their conflict. (Algora Publishing, 2003), p.209

⁵⁶ Islamic View on Artificial Insemination<https://www.al-islam.org/philosophy-islamic-laws-nasir-makarim-shirazi-jafar-subhani/question-72-islamic-view-artificial>

despicable crime and a major sin which deserves also to be classified in the same category of adultery”⁵⁷

Presently, the frozen sperms are also used to fertile the woman in Europe. The question also arise that if the sperms had already been taken by husband and preserved but the process of fusing has not started and either husband died or divorced his wife, can she used that sperms for fertilization? Infect, the relationship of husband and wife ended after the death of either one, so she can get benefit from these sperms. Sheikh Abd al-Khaliq Hassan al-Sharif says, “It is not permissible for the woman to use the frozen sperm of her husband after divorce or after his death. This issue is permissible only when both the husband and wife are living.”⁵⁸

In short according to Islamic teachings and above mentioned arguments, artificial insemination can be used as a last resort when husband is not able to fertile his wife through sexually but under meticulous, in safe laboratory conditions. All the concerned members like technicians, doctors and nurses etc. must be strong moral standing.⁵⁹ As written by Ismail Buyukcelebi in his book, ‘Living in the shade of Islam’ “Islam safeguards lineage by prohibiting adultery and fornication and legal adoption, thus keeping the family line clear and uncontaminated by any foreign element. Thus artificial insemination is forbidden unless the donor is the husband.”

Advantages and Disadvantages of Artificial insemination:

Artificial insemination is an important technique which has a number of benefits for example it serves an important role in reducing the infertility rate⁶⁰ by bring happiness in their family lives. It also save the humanity from the fatal diseases as doctors are able to choose healthy sperm and also wash it before fusing the egg. The women can have healthy children.⁶¹ It is not as expensive as Test Tube Baby Fertilization is. Only two people are enough and can be performed rapidly.⁶²

⁵⁷ Artificial Insemination from an Islamic Perspective, <https://archive.islamonline.net/?p=5356>

⁵⁸ slamOnLine.net.[homepage on the Internet]. Web site.

ArtificialInseminationfromanIslamicPerspective.[Updated 29 Dec2002. Accessed on 18 May2019].Availablefrom<http://islamonline.net/fatwa/english/FatwaDisplay.asp?hFatwaID=76500>

⁵⁹ Islam, Sharmin. Ethics of Assisted Reproductive Medicine: A Comparative Study of Western and Islamic Bioethics. (USA: International Institute of Islamic Thought (IIIT), 2013).

⁶⁰ <https://www.britannica.com/science/artificial-insemination>

⁶¹ Stuart Sam, Artificial Human Insemination: Report of a Conference Held in London under the Auspices of the Public Morality Council, (Elsevier, 2013),p1

⁶² Samper, Juan C. Equine Breeding Management and Artificial Insemination E-Book. (Elsevier Health Sciences, 2008).p 179

At the same time it is not free from side effects for e.g. the severest disadvantages is that this can lead to the multiple birth as a result the miscarriages rate can be increased. The new born babies will have low birth rate. It can also cause premature birth.⁶³ Further, if doctors commit some carelessness it can involve third party in case of sperms or eggs which is the greatest sin. As eggs are taken many times for the process it can cause trauma to the uterus or rectum. It has another problem that it become difficult some time to deposit the small volume of sperm in proper position.⁶⁴

This process can be useful for all types of infertility. Some people avoid it when they are asked for multiple efforts if the woman is not able to impregnate in first attempt. Some other people may not get fruitful results in either case.⁶⁵

Infertile couples will conceive a child after buying eggs from the sperm banks, paying doctors and laboratories. This will create a child industry overpowered by the rich people. Sale of eggs and sperms will start and lead to the unethical births only to save the family life or to fulfill the needs of the family.

Impact on society:

Although Artificial insemination is playing in important part to bring happiness in withered faces of infertile couples by maintain their family lines yet it has multiple effects on the society, for example, if it is used under the certain limits laid by Islam then it not only save the family life but society will accept it without hesitation but if the certain line was crossed, the family life will be shattered. When husband came to know that the sperms are used of donor he will not accept the child. He will not be ready to fulfill his duties. As a result the child will be neglected. When society and class mates came to know about the fact, he would be taunted by them. Consequently, he became a criminal or try to end his own life. The system of inheritance would be affected. Furthermore the system of donors can start a new industry and business. Sale and purchase of the sperms and eggs become common this ultimately promote the concept of single parents.

Conclusion:

Contemporary innovations made for the betterment of mankind are constantly accepted by Islam. It doesn't stop its followers to utilize them in their lives. The artificial insemination is likewise a gift for futile couples so they can utilize it and can conceive their own children. Before utilizing this process the doctors should

⁶³ <http://artificial-insemination-isu.blogspot.com/p/advantagesdisadvantages.html>

⁶⁴ Samper, Juan C. Equine Breeding Management and Artificial Insemination E-Book. (Elsevier Health Sciences, 2008).p180

⁶⁵ <https://www.webmd.com/infertility-and-reproduction/guide/artificial-insemination#2>

use other measures on first stage. If medicating process fails then it can be used. The couples must choose reliable doctors. If the female doctor is available to get the eggs then no need to find the male doctor. In case female doctor is not available, one member from the family must be present at the time of the process. Female should uncover only those parts which are necessary to open. The other thing is that the sperms and the eggs should be used of the spouses. The doctor should take utmost care while fusing the sperms and eggs that no third party can be involved in either case.

