



## Analysis of the use of stem cells from the Jurisprudence and Islamic law

*Ebrahim javanmard Farkhani<sup>1\*</sup> and Hosein Golchini<sup>2</sup>*

*1 Assistant Professor of Gonbad Kavous University, Doctor of Jurisprudence and Principles of Islamic Law from Tehran University, Researcher of Qom Seminary, Iran.*

*2 Assistant Professor of Gonbad Kavous University, Iran.*

### **Original Article:**

*Received 30 Jan. 2016 Accepted 18 Feb. 2016 Published 26 Feb. 2016*

### **ABSTRACT**

Since stem cell has the potential to produce any type of cell and tissue in the human body, it has a special place in genetic engineering and medical restoration. But this technology has had its own scientific and ethical implications in various communities which some would call it the "challenge of the century". In the meantime, ethics and sociology scholars, jurisprudent and law scholars, as well as Catholic, Orthodox, and Jewish scholars and some Muslims presented strong opposition against the techniques due to destruction of the embryo and the sanctity of potential human life, inflicting harm to women which give egg, Contrary to the teachings of divine rules and the rules as "do not harm" and disruption in the system and the rule "there should be neither harming nor reciprocating harm" demanded to stop researching in this regard. But on the other hand, some scholars accepted this according to the Ebahe (principle of permissibility), and the tazahom (principle of conflict) but some others believed that preventing from stem cell research for some its misuses and potential effects is wrong. And believed that it is necessary to establish appropriate rules, regulatory guidelines and developing moral solutions in the field. In this approach, the extraction of stem cells from embryos in vitro outside the womb for therapeutic and research applications- considering the potential of this researches to cure disease and reduce human suffering, it seems to be prescribed based on the occurrence of all these techniques outside the womb and those reasons for preventing are related to the destruction of potential life after implantation in the womb and the relevance of uterus But it must be legislated to create necessary restrictions and prevent misuse of the embryo and its giver.

### **Keyword:**

- ✓ Stem Cells
- ✓ Human Embryonic
- ✓ Cloning
- ✓ Bioethics
- ✓ Embryo

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\* Corresponding author: [javanmard@gonbad.ac.ir](mailto:javanmard@gonbad.ac.ir)

## INTRODUCTION

The advancement of human knowledge has always been seen as something positive and useful, but has not been often without obstacles and unscientific Challenges, The problems and Challenges are sometimes religious or cultural and sometimes moral. After the church felt Heliocentrism through inventions such as the telescope is being verified, ask its consultants to help and find a way to solve the problems between Heliocentrism and the old theory of geocentric model which was approved by the church. Unlike what is often claimed, the church support of Ptolemy's theory and Galileo's trial was not just a simple imposition by a religious institution on science's, which has proven once and for all the victory of science over superstition. If anyone believes that things like contradiction of Galileo and Darwin's scientific theories with some ideas, has been a simple contradiction between truth and falsehood and has been forgotten through the history, may be accused of oversimplification, since this issue in the past centuries was only about contradiction of science institution with religion's, but we are in a situation far more complex than before, a situation in which certain scientific and technical developments is confronting with the legal, political and social problems. Research on Stem cells and its achievements have had amazing results in medical science. These researches as the greatest development and the second revolution in the medical world after the human genome are one of the new challenges in genetic engineering. Success has not been secure from criticism and protests and many people with the slogan " natural is good" have risen to deny its value. It is very likely that future world in terms of medical issues will face with changes that will engage science with religion, ethics, theology, politics and culture. The news about obtaining stem cells by Iranian was the news that made Iran popular in the scientific world in this field. And made name for our country among the few countries that have the unique ability to produce stem cells; this news for many, both inside and outside the country, was incredible (Department of Studies and Research, 2007, P27).

"Nature" which is the world's most prestigious scientific journals wrote in an article referring to developments in the theme of stem cells and cloning : The educated young in Iran will still go their own individual ways but there is once again the opportunity for a privileged few to shine as scientists and can sidestep the many problems caused by US sanctions. Since 1998, debates in this regard were magnified, when researchers for the first time managed to isolate human embryonic stem cells. We also succeeded to produce stem cells in 2004 and these have been registered cells as Royan (embryo) in the world. However, these researches have been faced with extensive Jurisprudential, legal and social issues in the world.

Some issues raised include: Prohibition of genetic manipulation, increase in genetic disease, suspicion in business and concern about taking advantage of Material, effects and risks of using alternative sources, fighting with the Creator, the lack of ownership of the human body. Also, in this way, in vitro embryos are lost and some may say this is incompatible with human dignity (Kant, 1990, p60).The fetus from its inception has all the rights as a person get

benefits from, and then cannot be destroyed (Fatemi, 2000, P165). Evidence which are regarding to Prohibition of abortion and the need for compensation payments include it. In order to avoid possible complications, Accurate and immediate attention to Jurisprudential and legal implications of this technology and formulating solutions and required rules is necessary.

So some question arises: Can the destruction of human embryos be referred as an abortion and be prohibited?

Can seven days cell mass considered as alive creature just because it is in the path to grow and Initiation of cell division? Is in vitro embryo potentially a person? This action will lead to corruption and doesn't warding off corruptions/evils take precedence over bringing benefits? Is this process compatible with human dignity?

### History

Can anyone indefinitely culture specific cells in vitro? And medications of a patient before taking by the patient can be optimized on cells? Is it possible to study the development of a heart, liver, brain, etc., in mammals and especially humans with more details in a laboratory? Can a heart attack, diabetes or spinal cord injury be treated? And will that day arrive when like salamander, cutoff limbs (hands and feet) can be restored again? Scientists in the field of biology and medicine have a dream to answer to such questions. In 1981, this dream get somewhat closer to reality with the production of stem cells in Mice and human embryonic stem cells in 1998,. Most recently, in 2007, researchers have been able to change somatic cells such as skin cells into stem cells like embryonic and then generate differentiated cells from it. In the same year, the discoverer of embryonic stem cells was one of the people who received the Nobel Prize in Medicine. The fact is although drug therapy in the medicine considered as a basis for treatment but the future of medicine associated with cell therapy and Stem cells will have a special place in this regard (Baharvand, 2007, P15).

The discovery and generating of stem cells and their distinctions are just a starting point and the beginning of realizing the dream of restoring cells, tissues or lost or injured organs of the human. So there is still a long way for using these cells in treatment of human diseases. And prior to this, we should resolve the Juridical and legal issues regarding researches like: Violation the human dignity of the embryo and a few days cell mass, the origin of life and the beginning of human personality, the necessity of protecting cells in vitro and ... Medical uncertainties such as how the number of transplanted cells should be, to increase efficiency of Transplanted organ and prevention of transplant rejection.

### What are stem cells?

Stem cell is a word made up of two components which a cell as the smallest unit of a living organism is able to create something like itself. The stem is also as second component of this compound word. In Literal it means: the main and delicate part of a plant which is above the ground and leaves grow from there. It is clear the reason for naming these cells to stem cells due to their similarity to plant stem. Whereas other parts of a plant are created by stem, Stem cells are also able to generate other cells of a body. In terminology, this term in biology refers to cells which all genes are active and

able to continue their reproducibility without any limitation and have great power for Maintenance and Self-renewal and also have the ability to be transformed into a variety of cells and tissues.

Stem cells are primary cells which influenced by certain physiologic or experimental conditions and with specific functions can become cells such as cardiac muscle cells or insulin-producing cells in the pancreas. Cells differentiate into specialized cells and unspecialized ones. Specialized cells are cells that can only produce similar to them. For example, Cells from different organs of a human body are specialized cells. It means that the skin cell just produces skin cell and eye cell produces eye cell. On the contrary, some cells maintain their original state to become any type of cell and they do not have any restriction in this regard, which stem cell is considered as this type. And because of that, they are so valuable. As aborted fetuses or umbilical cord blood and body or bone marrow can be used to obtain stem cells, by cloning technology can also generate embryos and acquire Stem cells (Report of the United Nations/unesco, 2004, P15).

#### **The main applications of stem cells**

Advances in stem cell technology could be promising and efficient in several major areas. First: access to valuable information about the early stages of human development, Second: a preparation to test drugs on these cells instead of human experiments. And third: providing a variety of cells and tissues for restoration, transplantation and replacement of human organs and tissues. Stem cells could be used for regeneration of cells or tissues that are damaged by disease or injury. This type of treatment is known as cell therapy. One of the potential uses of this method is injection of embryonic stem cells to heart cells to regenerate cells which have suffered from heart attack. Each year in the US just, 3000 people die because of this type of disease and it is possible to provide treatment by cloning for therapy.

By using of stem cells technology, there will be possibility to treat many incurable diseases such as Alzheimer's disease and Parkinson's disease, heart disease, diabetes and AIDS. And also can be produced tissues for transplantation so that we do not need to wait for Organs to be donated. By this technique, we will be able to generate tissues with good quality whereas in organ transplantation, one of the main concerns is whether donor organs which mostly belong to the older person are healthy or carry cancer cells or cause infection or transmit the virus. Furthermore, in tissue and organ transplantation, specific drugs are used to prevent rejection of the new transplant. But because the stem cells can generate tissues and organs like patient's own tissues and organs, there is no need to use medicines.

#### **Jurisprudence issues in stem cell research**

Among the revolutionary achievements which the human beings is in doubt on its advantages and disadvantages is the technique to obtain embryonic stem cells from human embryos, and therefore, numerous questions have raised for scholars in various fields, including areas of jurisprudence and law. The question is that the mass of cells which is formed outside the womb by artificial fertilization in vitro has got the human dignity and right to live? And the reason for this dispute is this question: When does life begin? Although the fetus only takes 4 or 5 cells, some believe that it is like taking a life. Is taking cells from the human body wrong? Could destruction of human embryos be defined as

abortion and declared forbidden? Therefore, it is necessary for Jurisprudents to comment about these raised issues. There are discourses about the jurisprudential considerations of this research, which the main arguments of both groups will be expressed. To facilitate reading, the two groups are listed under two separate titles:

#### **Opponent's argument**

##### **A) The sanctity and dignity of embryo's potential life in early stages**

The starting point for any considerations about research on human embryo including researches on stem cell is about the dignity of embryo during the early stages of its formation. There is a controversial issue that raises certain ambiguity and this is about the relevance of this type of research with the production, usage and intentional destruction of human sperm. For this reason, according to this group, the basic question must be answered is that what is the obligation toward the form of human life. This issue is related to two important questions: First, when human life begins? And then, is early embryo considered as a "person" or not?

All those who has an idea about the stem cell research and the question of the legitimacy and illegitimacy of research on early embryos, At least certainly, believes that the life of a human organism, in whatever form it takes, possess intrinsic value. Even if the organism is not in Full-fledged and to be in the status of fertilized egg or embryo which is ready to be put in the uterus. Opponents say to justify their positions that although a few days old in vitro embryo does not look like to the human, the existence of every human starts from the beginning and because of that common origin, the human embryo is a person worthy of full human respect. Human germ is not just a mass of cells but it is an entity which is put in the path of evolution. They believe that If we claim germ cell is not just a mass of cells and does not have any worth and dignity more than other cells, in fact we will not understand the concept of "the ability of changing" correctly. Embryo from the moment of its coagulation is not only a human but in the full sense of the word is a "person" and so that it must have all human rights and respect that a "person" deserve.

A few days old embryos are "potentially" human being and if we take a human being equivalent to a person and because killing people is wrong and potentially fetus is a person, killing embryos are also wrong (Hemmati & Zamani, 2008, P172).

What from the Quran and tradition can be inferred is that a person who possesses "potential" of personality is a person, Therefore not only an actual person is considered as a person. But everything which has the potential but does not have it now such as anesthetized person and something that has this potential like embryo, all of them are considered as person. Potentiality and actuality of the past, present and future do not provide any effect on the person being because the Criterion is not actuality but its potential which there is in person (Pour mohammadi, 2008, Vol 2, P338).

From the perspective of this group, examination or research on early embryos is not permitted. They have questioned Fourteen days of the artificial boundaries that some have suggested for respecting the embryo and Suggest that the genetic identity of individual and human of an embryo exists from the beginning and there is no basis for such distinction as they believe that human life is like a chain

which continues from the beginning until death. And regardless of what we name it; there is always a chain of life and remains till death. There is a point in argument from advocators of stem cell research which has always been considerable and it is relevance or lack of relevance of the uterus. But it seems that we can abolish this feature of the uterus. They say "a few days embryo" and the "sperm in the womb" are in a common position since the common feature of both is moving to turn to human being; therefore, uterus has not relevance. Since in the past, fertilization outside the womb was not imaginable, such an order had been issued; but nowadays, since the possibility of insemination is provided outside the uterus, this feature can be ignored. Embryo possess the potential of human life and since its establishment, it is worthy of respect and rights. If it does not, why do jurists consider willful end of the pregnancy at any stage of embryonic development as a sin?

The group says the sperm outside the womb does not mean to be less value than the sperm inside the uterus but it just means that it is not in its natural environment. The group applies this example for their argument. Sperm outside the womb is like a bird out of its cage. If the bird spends its life in a cage and notable to fly, it does not mean that it is not a bird anymore but it means that the bird is far away from its environment. They believe that fertilized egg is respectable just because it is a starting point of a life (Movassegh, 2009, P98).

Another example of opposition and conflict with human dignity is obtaining stem cells from human embryos which are like taking the body parts of a prisoner sentenced to death and taking advantage of it for research and therapy just because he will die soon. Those who believe in rights and dignity of the embryo cite another argument: Although it is not proven that the early embryo is not a person, it is not proven otherwise. And as long as decisively is unproven that embryo is not a person, we need to deal with embryos with prudence and caution in a way that it is a human being. As regards it is possible to achieve to the same results, Advocates must prove that the only way to achieve such results is the extraction of embryonic stem cells from human embryos.

### **B) The principle of precaution**

There are a lot of points about stem cell biology and regulatory mechanisms of cell regeneration which are still not known. It is not clear that if a stem cell is be differentiated appropriately whether after transplantation will have a good growth or generate tumors. Regarding implications of this new technology, it is necessary to analyze profit against loss. The mere existence of advantages for analysis of the benefit ratio to risk is not enough. The Complications and risk should be further studied and compare with the benefits. The use of stem cells for the treatment of serious diseases such as Parkinson may justify their use in beautification and rejuvenation or this technology will lead toward the production of humans because the defined boundaries between these cases has not been determined. Creating environments to culture embryonic stem cells, the exploitation of women to obtain the necessary oocytes, using embryos for the generation of scarce organs and commercialization of human life are some cases which embryonic stem cells research could pave the way for them.

In contrast, some jurists have suggested technologies and scientific discoveries based on their applications may have good or bad results and this does not cause to issue order against them.

According to these experts, the principle of precaution runs when there is a serious and irreversible risk. Finally, we must always be aware of the damages of the new technology may bring and put it against the losses which will continue in its absence. The principle of precaution wants us to pay more attention to the inherent risks in new technology to prevent of those risks that the technology introduces us. One of the contrary arguments, in a situation where the primary principle is the principle of permission, how we can talk about prohibiting because the studies on the path of evolution like any other human knowledge require trial and error. It may be necessary some people are sacrificed to solve the future problems of human being. In response to this type of argument, should be noted that the principle of permission is permitted only if it is not to be in contrary to macro interests of the human beings. Atomic bomb is a significant evidence of human's extraordinary achievement which its irreversible damage to humanity is enough for its production to be prohibited.

### **C) There should be neither harming nor reciprocating harm**

Since Islam forbid something that is harmful, it is not accepted any loss and damage. Therefore, undoubtedly extracting a few day old embryos for the purpose of treatment must be discussed in relation not to harm embryos. Although Cell extraction from the patient's body and using it to generate necessary tissues is permissible but if an embryo or sperm is formed in this process, it is forbidden to be destroyed because the legislator has forbidden disrespecting sperms. Because sperm is the source of human development, it is not permitted to be destroyed (javahery, 2006, P106).

### **D) Alternative methods**

Stem cells have many benefits and provide the possibility to treat many incurable and terrible diseases and solve the problem of rejection transplant organ and tissue and will be achieved an organ that is genetically similar to the patient's tissue and organ. But these benefits can be achieved in other ways. Recent researches on the mature human embryonic stem cells and stem cells derived from umbilical cord blood have revealed that these stem cells as well as embryonic stem cells, has the ability to treat diseases. Therefore, the argument that the stem cells to treat diseases are essential is not anymore convincing. The answer is that other ways to obtain stem cells is impossible or impractical or have very limited benefits and cannot be replaced in all cases by these researches. Some of the reasons for advantages of embryonic stem cells over adult stem cells include: 1. embryonic stem cells are immortal, unlike adult cells that are undergone the aging process and loss the possibility of proliferation. 2. In comparison with adult stem cells, have more potential ability to generate different kinds of tissues and cells. 3. Control the stages of growth and differentiation is simpler than adult stem cells. 4. Due to more relatively in number, they are isolated easier than adult stem cells.

## F) Warding off corruptions

Now, regarding to the strategic importance of the achievements of embryonic stem cells, human scientific potential in this area is considered as a part of the scientific secrets. The promises of this knowledge in the realm of treatment open different windows to face human diseases. This knowledge promises Prospects for all branches of the treatment including a cure for diabetes, AIDS, or even possibility to achieve to the secret of youth that everyone is able to get back to any age he or she wants to (Department of Studies and Research, 2007, P22). Finally, science is a double-edged blade. One edge of it may not make a problem but is also desirable and in order to counteract some the problems and anomalies but the other edge are so sensitive and improper that can be disturbing and problematic (Fatemi, 2002, P55-68). In this regard, in many cases, the opponents of stem cells application to treat diseases cite this rule of jurisprudence "Warding off corruptions/evils takes precedence over bringing benefits". This principle has been argued on many cases and based on it, according to the aforementioned principle, although the technology of stem cell has some benefits but it is prohibited. Although this technology in some cases is useful but its disadvantages is more than its profits and religiously known "Warding off corruptions/evils takes precedence over bringing benefits. In most cases which this rule has been cited, it seems that this principle has been applied in general and carelessly. In this regard, several points should be noted: First, it appears that this rule is relevant to the religious interests and losses not to the common material profits and losses (mohaghegh damad, 2003, P155).

Secondly, the principle runs where there is a consensus about interest and corruption or at least there is corruption and then we are demanded prefer one over the other. But since the interest or corruption is still discussed, we cannot apply this rule (Mehran, 2005, P375).

Thirdly, the principle runs when interest and corruption are equal. But when interest and corruption is preferred to each other, this cannot be applied. Because, corruption largely arising from imaginative literature and cynical attitudes and wrong assumptions. Sometimes reason and common sense and tradition will issue just the opposite of mentioned rule. Applying this rule leads to recession in all commercial operation. Therefore, Akhund Khorasani, not only doubted about the priority of corruption but It claims that maybe the opposite of the rule is true (Akhund Khorasani, 1988, P177).while the history of science is full of events that essentially should not happened based on this principle. For example, if the Wright brothers who were the first aircraft manufacturers, operated this according to the rules during a test flight, they'd abandon it or when for the first time Pasteur injected rabies vaccine to himself, he would not do that. However it requires the abandonment of any new experience and to refrain from any test

### Arguments of Advocates

#### A) The lack of necessity for protecting the potential life of the embryo

It must be noted that since in general and absolutely the embryo is referred to different stages of evolution, this idea has emerged that the thing is destroyed in order to obtain stem cells is embryo; while the thing is Just a formed mass of cells which often is extracted before 14 days. Due to the absence of any tissue before 14 days, it is called the "pre-

embryo" and avoided to be named embryo. Because none of issues related to perception, consciousness, pain, etc...., does apply in the case of pre-embryos and it is never comparable to fetus in utero. According to Islamic jurisprudence, the fetus which is still in the early stages is not transferred to the uterus, whether it is cloned using SCNT or produced in IVF process not deal with religious Commandments Such as the necessity of preserving and the prohibition of violation and there is no problem to research and extract stem cells before being transferred to the womb because the reasons related to the prohibition of abortion and the need for compensation payments are related to the establishment and after implantation in the uterus.

From the different Verses of the Quran concerning to the creation of man Such as the verse "Then We placed him as a sperm in a firmly established lodging" (Al-Mu'minun: 13) is Also acquired that the creation of the first stage is when the embryo is set in the womb. The mere fact that the collections of cells are qualified to become humans could not be a reason to prohibit extraction stem cells. Because there are some cases in jurisprudence which can be understood from them that just because the sperms have the potential to become full human beings, it is not a reason to prohibit its destruction.

One of these issues is preventing the ejaculation of semen in the uterus, it shows that uterus is not matter and if semen in a womb is released, it has the potential to continue to grow and become a full human being. But if cell mass is released it will be destroyed. So basically human life has not begun and it is not obligatory to provide conditions of life (in the womb) for it.

Another reason for this view is this tenet of belief: the fetal that is in a process before blowing the soul, will not live in the resurrection. In other words, the body that has no soul will not be raised again just like a fetus before the blowing the soul has not any funeral ceremony. In other words, in this view, the potential ability of embryo is not matter until it does not have a condition to become a person, then there is no real different between embryo and other cell mass which has not qualify for this potential and therefore there is not necessary to respect the embryo more than the other body cell mass.

In addition, there are many differences between a person and the potential person. Human sperm can become a person only if settle in the uterus and the process of extracting embryonic stem cells from a human embryo is not necessary (sohrabi, 2007, p225). The claim that the early embryo has the right to life is based on the belief that embryo is not only alive, but also qualify for features that most living tissue does not possess. So the argument is circular.

#### B) Principle of permission

In The Shiite, divine rule has been divided into two categories: primary and secondary. For everything that is not a reason to ban it, the primary order is permission. If then a property accrues, it might be considered illegal. But, as secondary in cases where the actual rule is not detectable we cannot say initially that the first principle in anything is permission. But after researching the actual divine rule, finally, if we have doubts, then we can use the principle of permission and apparent permission is compatible with secondary Prohibition. In a simple expression, many of the

issues as primary are not prohibited but something accrues on it that we need to issue another order which is called secondary Prohibition (Fazel, 2006, P71).

To clear, we can use this argue by opposite concept of opponent reasons. Opponent of extracting cell stem out of womb mostly argue to reasons which if those are right those present the corruption on this action, while based on jurisprudence of Shiite, preface of haram is not haram. In the other words, the consequence of arguments should be separated from the issue and not to be mixed with it. The possibility and impossibility of naming abortion and destruction of a person is one of the results of extracting cell stem and should be considered without its permission or its inadmissibility. But it seems there is not legal reason to show that the possession in human egg which does not have still human origin to be prohibited.

Act of removing oocyte nucleus and inserting somatic cell nucleus, even if there is not a goal, ultimately, will be a farce. However, acting in vain is not forbidden. There is no legal reason that fertilized egg should be used in a way to be born a child. But according to the principle "everything is halal" and the Principle of acquittal which are certainty our legal principle, obtaining stem cells from the cell mass is permitted and therefore is not haram. In short, rely on this reason, obtaining stem cells from human embryos is not haram. And its ban is contingent on a reason (Including absolute, text or criterion from which remove the property) which deprives the possibility of invoking to permission principle.

### C) Contradiction of two rules

Nowadays, Stem cell technology is known to everyone as the last human achievement for treatment incurable diseases to meet the health and recovery of the human species. Also in Islam, the overall health of human beings and improvement has got inherent desirability (Mohammadi, 2007, p155).

Hence many to support their reasons to take advantage of this wonderful invention of mankind, adherent to a rule in Islamic law which is referred "contradiction of two rules" that is, conflict of two religious rules which they have the criteria to act and there are no barriers to actualize both rules but person's inability to do both (Habibi, 2001, P127). In term, if two rules interfere to each other in a way cannot be done both, the situation is called contradiction. In this case, if one is more important than another, the second one abounded and it is called the priority of more important than important one. Based on this rule, it must be selected which is more benefits or less risk, if there is no way to get rid of the contradiction. In case of contradiction between respecting the fetus and the necessity of protecting human life, it is worth mentioning and well understood from verses of the Qur'an and the Hadith, as well as from many jurists that saving life is especially important as much as the reservation for the safety of own life or other's and accountability of the oppressive ruler which is under normal circumstances condemned. In order to this goal, has been authorized. Also, many of prohibited deeds in the case of contradiction to save own life or others, are permissible and some obligatory is forbidden (Tusi, 2011, p357).

Thus, cultivation of stem cell in order to save the lives of Muslim patients is related to the topic of important and

more important and adoption of more important based on wisdom and with the consensus of jurists and legal theorists is obligatory. And according to the contradiction, important rules, namely the prohibition of the destruction of cell mass is not actualized. If there is no way to save the lives of patients in need of transplants expect transplantation of a few days old embryo, it is rational to prefer the first in the conflict between patient survival and obtaining cells derived from cell mass, Because there is no reason to be preferred "a cell mass" which is not yet known as the origin of human being and the beginning of the life. Hence, some believe that the right to life of the fetus is relative. This means that destruction of a human being in its embryonic stage is not permitted unless a greater interest makes a right for us (Shiravi, 2010, P152).

But, in this regard some say that all of us have emerged from sperm and must remember that every life deserves equal respect. In their view, sperm is as valuable as a person. And because of this equality should not be used for another human and then be destroyed. This status was once our status. In fact, just because of the insignificance of a sperm, our responsibility to respect and preserve its life increases. As a result, feelings about the loss of human sperm is different from the feeling about death of a child, But if these feelings is not regulated based on a commitment to human equality, can lead to many abuses (Jonas, 1973, P32).

According to this group, the end should not justify means and reduction or elimination of pain suffering in patients should not be considered as absolute value and above other values and interests. If our only concern is how much we live and how we live, that will be worthless.

### Legal Considerations Regarding Stem Cell Research

It became clear from previous discussions that the fundamental question related to stem cells is when the fetus has the right and obligation and the beginning of its personality? Is destroying human embryos after obtaining stem cells form it, considered under the regulation of abortion? If this question is answered, the possible stand in Iran regarding cell stem research will be identified. This response can be assessed by examining the rules on abortion:

#### Naming Abortion on the cell mass extraction

In Iran's law, there is not a resolute affirmation in rules and regulations about the beginning of the human personality and the creation of human. According to Some professors in law (Safai & Qasemzadeh, 1996, P32), existence of natural person legally begins with his or her birth and since that human has the right if he or she is born alive (Civil Law enacted 1314: Section 975 and 851 and 875). But some believes (katouzian, 1997, p95) carriers in the first months of pregnancy is the organ of the woman. This right due to the duality is not clear. Do we should consider carried on the way of development and growth or should considered as woman's organs which becomes a person after the birth.

The first view is more suitable to the philosophy of human existence continuity from the creation and transformation life in the material world and the spiritual world. Although, there are some materials in civil law about the heritage of what in the belly is and testament for it and confess in favor of it but according to the teachings of Islam, the fetus which

does not have a soul is not addressed as person or "son" (Bojnordi, 1998, Vol 4, P25). And After four months, the fetus will benefit from human rights.

It was decided in the medical abortion law enacted in 1384, the abortion therapy is allowed by definitive diagnosis of three doctors and the Coroner's Confirmation based on embryo disease which causes maternal difficulties due to retarded or deformed embryo, before the blowing the soul into the body (four months), with the consent of the woman and there will not be any punishment and responsibility for the doctor; While if at this stage the embryo is considered as human it would not allowed to destroy it (Rahimi, 2007, P332). It is not unlikely that we are able to extent the order of Articles 622 to 624 of the Islamic Penal Code in the case of abortion based on the unity of criterion and say that the major criterion about abortion is destruction of something which normally could be a human in future and there is this criterion in this regard (Waste of sperm fertilized outside the womb).

Nevertheless, the law is silent about the destruction of embryos before putting in the womb and according to Article 167 of the Constitution; in this case, the judge is required to find answers referring to the authoritative Islamic sources and valid Fatwas. It seems that the abortion provisions are not applicable to destruction of embryos in vitro. First, the abortion is common sense and is referred to the loss of the fetus before the full development in uterus.

Second, mansos alelah analogy (obtaining a judicial decree which is not found its reason and inferred by opinions and judgments) is not accepted in Imamiyah Jurisprudence and the provisions about the destruction of embryo and abortion inside and outside the womb cannot be the same. Third, some scholars in dealing with this research which is new stuffs and its religious rule is not determined, has been invoke to the principle Abahhe.

Fourth, Article 487 of the Islamic Penal Code indicates that in the case of abortion, the lowest amount of blood money belongs to the sperm in the womb and before that, there is no blood money. The illegality of abortion in the criminal provisions must be interpreted narrowly and in suspicious and dubious cases, we can use the principle of acquittance. However, by all the social changes and scientific findings, we find ourselves in a position we are playing with the life of embryo. With perceptions of modern science about fetal development, its stages and mobility as well as the beginning of embryonic life, could be considered to be permitted or prohibited. Hence, in penal system, delaying execution of pregnant women in the very early stages till after childbirth and determination of child custody is necessary. In these cases, if a female abort the fetus at any stage of pregnancy, the legal heirs of the fetus will inherit (Sashadina, 2007, p39).

#### **Stem cells, public order and Good behavior**

The term public order in law and jurisprudence is a well-known term and has several definitions but there are no exact criteria to identify examples of public order. And Lawyers have not presented a single and clear definition of public order and this concept is unclear among them too (Safai, 2003, P51). Hence some lawyers (katouzian) know the public interest criteriatio determine imperative rules and the Laws which are enacted in order to protect the collective interest of the community, name the rules with aspects of public order.

It is obvious that most of the rules have the social aspects and the legislator has considered a general interest in its legislation. Therefore these criteria cannot be the only determinant of the rules and public order. It seems that public orders include some rule which everyone should respect to maintain Public order and not to be taken apart. It is natural that in a systematic society, people should not be able to have power to disrupt the order or compromise. Therefore it is said: one of the most important characteristics of public order is the necessity of observation by the whole population (Sanhory, Vol 1, P399).

Since society, individual's relationship, needs, and public interests in society are changing, we cannot consider a fixed and static concept to identify the meaning of public order. So it is not expected the public order in all eras and times is the same. Since the process of obtaining stem cells from simulated embryos to certain processes is the same as the simulation of something else, some mentioned the same arguments and evidences which has mentioned for human cloning including disturbing the family system, disadvantages, losses and adverse outcomes of cloning, prohibition of organ trade, incompatible with human dignity. The consequences of these two phenomena are not the same then cannot be issued the same verdict.

Some to support their idea about incompatibility of this technique with the public order say: This makes taking advantage of poor women to give their egg, using simulated cells as storage for transplanted organs, concerning about making efforts to produce creature like human, fearing of mundane taking advantage and eventually leads to disorder in system.

In this argument can be said what rationally and logically as contrary to public order and good behavior can lead to legislative prohibition by legislator is the consequences of the phenomenon not possible misuse of it. If we prohibit every technique which probably will be misused in the future, all hell broke loose. Human should remain in the same level or may lower than and not waited for any innovation. It is the duty of legislators and legislative system that by review and consideration the various aspects identify the frameworks and prevent the abuses.

On the other hand, this kind of abuse against morality and social system isn't dominant and if it happens it is not so surprising because the human beings always seek to take advantage of any phenomenon. As a result, based on these reasons and some abuses to contrast this technology with good morals and public order is principle of sade zaraye (block the means which might possibly lead to undesired consequences) which in Shiite, considered as a prohibited prerequisite and Its authority has been rejected.

#### **The view of divine religious on cell stems research**

##### **The teachings of the Catholic Church**

Catholic moral and religious reasons against this research are just as the reasons have been presented against abortion. Abortion is illegal and immoral and cannot be carried out for various reasons. From the Catholic perspective, abortion is nothing but killing innocent people. The killing of innocents is completely immoral and unacceptable action. From this perspective, there is no difference between a fetus and a perfect human.

Every right which we consider about a mother must be considered the equivalent of it for even one-day embryo. As a result, every sentence is given about the killing of innocent

human; we must extend the same to the fetus. The official Catholic teaching on this issue is that the god created the human based on his own image and everyone's life is sacred and must be absolutely respected from the moment of conception until natural death. Destruction embryonic life is not directly allowed for anybody and for any reason. The deliberate destruction of embryos is a great sin and against the natural law. In various documents, the emphasis is on the early life, i mean the moment of fertility. As a result, immediately after conception, a sacred and unconditional life begins and no one has the right to destroy it. This issue is so obvious that does not require any further discussion. It should be noted that the official stance of the Church on the issue of abortion has not always been like that. In the past, some of the intellectual leaders of the religion had permitted deliberate abortions.

For example, St. Thomas Aquinas argued that the embryo has not a soul for forty days and sometimes up to eighty days after fertilization. Therefore, abortion during early pregnancy is not morally wrong. In fact, unconditional respect for the life of the fetus gradually formed by the authority of the Church and expanded. In January 2001, the Anglican Bishop of Oxford said that research on embryos and their destruction is consistent with the traditional position of Christianity. And consideration of embryo as a human was formed in the nineteenth century by the Catholic Church (Islam, 2004, P225).

#### **Protestant**

But unlike Catholics, Protestants in exceptional cases, such as having children of infertile couples do not prohibit the possibility of researching but they do not have consensus in the research. Like Catholics, Some of them have banned it due to violation of the sanctity of unborn baby and some others consider it permissible (Larijani & Zahedi, 2004, p75).

#### **Jews**

A group of Jewish religious scholars permit the research in exceptional circumstances for infertility and some others consider it permissible when it is proven that the benefit is more than its disadvantages. But in the both cases of permission, it is contingent on not to violate the sanctity and dignity of human beings in this way. In Judaism, the full dignity of human does not begin from the moment of conception and need to be replaced and grown in the uterus. Therefore, some Jews believe that if the resulting embryo does not have the potential to replace in the womb it can be used for research purposes. British Jews have expressed the same view. According to Jewish law, neither the fetus nor embryo before implantation in the womb and even before the birth is considered as a "person" But human being's life must be respected. Responsibilities and rights of personhood begin at the moment of birth. But in some cases, the responsibility can be neglected because of the other responsibilities; I mean what we owe the "individuals" (Rahimi, 2007, P329). Orthodox Clergymen permitted to abort in cases of rape, based on the seed and field allegory: being unwanted seed in the field does not make any obligation to nurture the strange seed.

#### **Shia scholar's views**

A considerable number of Shiite jurists and authorities have not objected applying of stem cell for the research and

therapeutic usages. Ayatollah Naser Makarem Shirazi in response to the Estefta Question says: If it is merely a scientific study or opening a way to grow organs for transplantation to repair defects that will be fine (Makarem Shirazi, 2003, P1). Ayatollah Yousef Sanei deems this research permissible in rare cases, which is beneficial to human society and the use of its scientific aspects, such as organ transplantation for treatment and rational motivations (Saanei, 2002, p1).

Doctor Abu al-Qasim Gorgy has the idea that as long as the fetus does not a human life can be used for human purposes. He believes that the time of creation, which according to Islamic tradition is four months, as a blowing the soul into body, is open to discuss and should be discussed when the fetus possesses the human life (Gorgy, 2002, P11).

Ayatollah Momen Qomi says: Due to practical, intellectual and religious principles, the 7 days 200 cells embryo can be destroyed and the narrations that indicate to prohibition is related to the implanted sperms in the womb of woman. Then there is no reason to extent in other cases but analogy which is not valid (Momen Qomi, 2006, p136).

Abortion means ending unborn child before full development in the womb and It is not clear whether creation of embryo and destruction of it before life conditions to be completed, considered abortion to be under the traditions concerning the payment blood money or not. If this was haram, discarding embryos in vitro should be considered haram too. While some jurists believe that there is no reason for the prohibition of disposing of fetus outside the womb before the soul is blown. So abortion is prohibited after implantation in the uterus, and there is no reason for prohibition of its use before the implantation in the uterus and therapeutic usage (Montazeri: [www.montazeri.com](http://www.montazeri.com)).

The Guardian Council announced in response to the same question: Sperm and mixed egg outside the womb does not have legally any decree of the embryo or fetus. Destruction of human embryos before implantation in the uterus is permissible; it is not a sin and no need for blood money (Sadeghi, 2004, p88).

Ayatollah Nouri Hamadani at a meeting with Minister of Health and Medical Sciences and the heads of the medical universities, appreciating the progress of stem cell scientists said: "If fertilization takes place in accordance with the Islamic Sharia and the society does not face with the damages, it is permissible" (Mohammadi, 2008, p464).

#### **Conclusion**

By careful consideration on the basis of the raised criticisms, it became clear that the main issue in the technology of obtaining stem cells from the embryos is legal status of embryo which is going to be destroyed after extraction of stem cells. Review of the verses and hadiths related to abortion and article 487 of the Islamic Penal Code and with regard to the literal and idiomatic meaning of this word suggest that these evidences is referring to abortion after implication in the uterus. And even though a few days embryo has viability, but is not considered a human being and has no dignity and respect. Because all of these techniques take place outside of the uterus, you cannot conclude prohibition for the destruction of a few days old embryo. On the other hand, the feature of implantation in the womb is the same feature and definite cause which the



founder and legislator have called it carrying and it cannot be ignored. Believers to prohibition of these researches, more citing the reasons which if accepted, indicating to corruption accrued on actions while according to givens Shi'ite jurisprudence, prerequisite of haram is not haram (anything that is forbidden by Allah). But other objections is raised that can be tried to remove them (like inefficiencies) or those objections considered serious and convincing (such as the existence of alternative methods). Finally, due to the lack of respect for the not implanted and non-necessity of the embryo in the uterus, and the importance of patient life over destruction of simulated embryo, we prefer the more important than important one based on rule tazahom. Especially justify the multiple ability and potential of cell stems to treat Incurable diseases and ensuring the health of human life by removing the cell mass for society.

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