



Pychological Problems of Human Reproductive Cloning from Islamic Viewpoint

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Abstract

Since the time the possibility of human reproductive cloning was proved, there have been serious concerns over practicing this new breakthrough in creating human being. In these debates which often have a negative approach towards it, different harms and consequences of possible practice of this technology in reproduction of human are mentioned. This article discusses the suggested psychological problems of the issue through an analytical method. Identical ambiguity, the negative effects of knowing your future, man without individuality and identity, psychological damages to the cloned child if the parents' divorce, Second-order humans, Negating man's autonomy and independence plus excessive expectations from clones are the objections raised by the opponents of human reproductive cloning from this aspect.

Keywords: human reproductive Cloning, SCNT, Somatic cells, psychological problems.



Introduction

Cloning has been happening in nature and some plants and animals have generally reproduced their new generation in this way. However, cloning in its new form is considered an innovation, hence it is one of the greatest turning points in modern medical research. Reproductive cloning is a technology used to generate an animal that has the same nuclear DNA as another currently or previously existing animal. (Cloning, 2015). In the process of doing it through somatic cell nuclear transfer (SCNT), the nucleus of a somatic cell is transferred into an enucleated matured oocyte for the generation of a new individual, genetically identical to the somatic cell donor. (Lawrence and Yoo, 2009, p. 268) After the process is done in the laboratory, for further growth it must be placed in the maternal womb. (Yaniv, 2005, p. 3)

Particularly when concerned with human reproductive cloning,

this issue has become one of the critical problems of the future. That is why the religious constitutions in various societies have particularly given it some reflections. This technology influences a large area of science, so any mistake or unexpected behavior related to this could cause detrimental consequences. In the same way, abandoning research on this technology out of an ill-conceived fear could deprive human society from the many benefits of this astonishing discovery. Therefore, before absolutely condemning or approving any study on this subject, it needs to be approached with more patience. This article attempts to study and analyze psychological harms in human reproductive cloning as mentioned by its opponents.

Identical ambiguity

Since the cloned baby does not have a known (or identifiable) father, it will suffer from emotional deficiencies and psychophysiological sadness and complexes. Orphans do not have their fathers, but they know the history of their fathers. Cloned babies will suffer from both - not having and not knowing their fathers. Often research shows that a great number of criminals and people with psychological problems are those who somehow were deprived from the gift of having a family. After the Second World War, especially in Europe and some other countries, four million people were killed, moral values were forgotten, and lots of scholars and thinkers became pessimistic about man. It was after the Second World War that nihilism came to existence and the collapse of families and society began, while psychophysiological problems manifested themselves in different ways. So if the family-less cloned babies will be added to all already-existing problems, then what kind of a world will it be? (Yekta, 2002, p. 228)

Analysis: This view sounds very pessimistic that if an infertile couple decides to have a baby through cloning, then the child will have a family and parents who love him/her. For such a couple, a life without a child can be very depressing, while cloning can offer a glimmer of hope in their hearts, and could help them live a happy life. In such a case, cloning can be a cause for happiness in a man's life. Moreover, even if the somatic cell of someone other than the husband is used, they can fuse the somatic cell and the ovule of a man and a woman they know, even then the child's history can be preserved, and the child will not suffer from not knowing his/her lineage. (Agha Mohammadi, 2017, p.196)

The other point is that cloning is a very expensive process and it is not going to be widespread. Assuming that there will be such a problem, then it is not in the nature of cloning, it is being practiced on a large scale.

The negative effects of knowing your future

Some experts oppose reproductive cloning because they worry that a baby created with a nuclear genome that is identical to someone will face a permanent burden of expectations based on that genetic equivalence. Some fear the child may lose capability of developing an independent identity because he or she will have a genome that already has been lived by another person. (Javitt, Suthers, & Hudson, 2005, p. 18) A child born as a genetic copy of someone else may also feel undue pressure to become like or different from its progenitor. (Glassman, Szumski, and Cothran, 2005, p. 12)

The cloned baby will know that his/her genetic source has suffered or died from a specific heritable disease. This person will have a painful life since he/she knows what kind of a fate is

waiting, and they know the exact time of death. Sometimes this problem is called the violation of the right to have an open future (Muhammadi, 2007, p. 63). Alternatively, if they procreate two babies after some interval, then the second child will know what is waiting for him, according to what has happened to the first child.

It has been said that knowing the path the earlier twin has taken draws the future of the later twin, and in many cases it will have severe effects and damages to them since they feel that their future is already planned and they have no choice in life, except to follow the direction of the other, even if this feeling is not yet scientifically proven. (Ibid, p. 64)

Analysis: This reason is not enough to prohibit cloning as we know there are families that suffer from high blood pressure, heart disease, obesity, diabetes or other genetic diseases while no one rejects their right of having a child. Therefore, if they are certain about the diseases to be passed on, they should avoid informing the child of the genetic disease which is waiting for him/her. (Jawaheri, 2006, p. 89)

If telling the child about this fact cannot help prevent it, it might be the case that the possibility to stop or to weaken the illness exists so the child can easily be informed. This is especially helpful when we know many problems and diseases can be prevented by a specific diet or medicine that can be taken in advance.

Moreover, who says that the first child is going to be subject to genetic diseases in the future? These babies can be like many others living with no problem, especially through genetic engineering where some of the possible genetic damages are prevented so the clones are less likely to get illnesses than those born through sexual intercourse. after Having rejected the idea of genetic determinism, Rossant and Lunenfeld maintain thus: "However, recent scientific findings have revealed that a 'one-

gene, one-disease' approach is far too simplistic. Even in the relatively small list of genes currently associated with a specific disease, knowing the complete DNA sequence of the gene does not allow a scientist to predict if a given person will get the disease. For example, in breast cancer there can be many different changes in the DNA, and for some specific mutations, there is a calculated risk of developing the disease, while for other changes the risk is unknown". (Rossant and Lunenfeld, 1997, p. 33)

Actually, the popular fear of cloning is based on genetic determinism, i.e., considering the clones to be exact copies of the original and identical to each other in all aspects. There exist many evidence from animal cloning that this is not the case. (Reproductive cloning: ethical and social issues, 2004) Those who hope to create identical copies of others through cloning will inevitably be disappointed, as environmental and cultural factors will result in every clone becoming a different and unique individual. (Sparrow, 2006, p. 3)

Man without individuality and identity

To know the way of life taken by one's predecessor might cause the cloned not to have a sense of uniqueness and individuality and such a person is likely to experience excessive pressure to reach the success the earlier twin already had achieved. (Yount, 2004, p. 4) The cloned person has no father, mother, brother or sister. They only have their source or genetic twin. Such people suffer from the lack of a true identity. When tens of thousands are cloned after a person, then there will be crisis in society. Cloned people lack an identity and, as a result, a society will be created by this type of people.

Analysis: Bearing in mind the fact that they would be less similar in genetic and environmental terms to their parent than

identical twins to each other, it is illogical to consider clones to be deprived of their own identities. (Smajdor, p. 7) It has been said that the clone can have parents, a family and through these relationships, they will have their own identity. It is true that if there are many people with the same identity and fingerprint, then there could be some problems for them and for society, but the notion of a person being copied into the tens and thousands actually becoming a reality sounds more like science fiction. "Cloning has been a popular topic in science fiction movies, books, and television. Blade Runner, Multiplicity, Star Trek, Jurassic Park, The Boys from Brazil, and many others have portrayed cloning in some manner. One of the most popular misconceptions that results from science fiction portrayal is that a human clone will be identical in every way to the person being cloned. She will look the same, have every memory, every scar, and the same personality and intelligence as her counterpart. This, however, is clearly beyond the reach of current science. What a human clone will be is, very simply, a genetic twin of the person being cloned". (Bruner, p. 8).

Moreover, this reasoning is not enough to abandon the whole process of cloning, when a couple would probably use the process to have one or two children. Therefore, it does not seem reasonable to abandon an important technology for fear of such probable misuse. Additionally, to say that a society will lose its identity like its individuals, the assumption here is that there is a society where all members or at least a great number of its citizens are cloned people. However, the opponents forget the fact that natural procreation is not going to be banned or suspended, so if cloning is to be practiced, regardless of the high cost, the procreation of the rest of citizens will be through the natural way. Again, if we take this problem for granted, it is not inherent to cloning and is actually the consequence of an uncontrolled way of practicing it.

Psychological damages to the cloned child if the parents' divorce

Even if parents accept the cloned baby as their natural child, there is still some doubt about the child's future if the parents get separated. The fact is that the cloned baby belongs only to one of the parents whose DNA is used for cloning. One concern might be that what will be the reaction of the mother towards the baby if the parents get divorced when the father's DNA is used in the cloning procedure? Hence, the parents and the child might always have such worries. (Ale Kajbaf and Akhtari, 2012, p. 135)

Analysis: There are some points to bear in mind in this regard:

First: Even when the DNA of the father is involved, the de-nucleated egg of the mother is used. In this case, her cytoplasm also has a role in the formation of the embryo. In addition, the embryo has fed from her blood for nine months and then the child has suckled from the mother. Therefore, the question is that why should we imagine that this mother will have no feelings towards the baby.

Second: This assumption is for the case of divorce and it is not enough to abandon cloning in general. What if the parents do not get divorced?

Third: What if there is an infertile couple who wants to divorce for this problem that they cannot have children, while cloning could prevent it.

Fourth: There are some couples having problems in their marital life with each other, now can we forbid them from having a child?

Second-order humans

It has been mentioned that knowing how they have received their genes will affect the cloned people. The German philosopher

Juergen Habermass holds thus: “When someone knows that his/her genetic structure is neither due to natural accident nor to divine will, but someone else like him/her is involved, then certainly he/she will be influenced by this fact.” (Decker, 2002) When the child knows they are not accepted as a natural object, what kind of self-awareness will they have? Especially, if the early twin is a known person, then the cloned child would always be compared with the early twin, and the society will have expectations from him/her. (Muhammadi, 2007, pp. 65-68)

Analysis: Cloning is just a medical process that the parents go through for having a baby, so if they do not talk about it to anyone, who is going to know about it? When the baby is born, he/she is an infant and not similar to the donor, and when they grow up if the similarity with the donor becomes clear, then it could be chance, like many examples. Parents are able to hide such a secret from the child and others as well. Imagine if the cloned person knows that the early twin had a very ugly face or nose, but through the cloning process and by changes done to the genes, they themselves are able to have a pretty one. Does this knowledge give him/her more self-confidence? The same can be said about character traits related to the genes that can be elevated through genetic engineering.

The opponents maintain that if the early twin was an important person, then the clone will live in its shadow and will suffer a sort of pressure. This fact that the donor was a well-known person could actually give the clone a boost in self-confidence. One cannot say this experience would always be negative.

The future of all people and what they achieve within themselves is bound to a complex combination of inheritance and socialization. We might have specific genetic potentialities, but what others teach us, the chances that others give us, and the way they treat us, are all of vital importance in the formation of our characters. Socialization also includes accepting the person whom we greatly

respect as a role model. With all these in mind, we can notice the destructive effects of discrimination, torture, and humiliation done by others. This social reaction is the only way to give man “self-awareness.” We usually see ourselves through the eyes of others. The child first observes the self through the parents, and gradually “significant others” get into a more universal concept as “society” or “others.” At the time when the child cannot read a book, they can see love, hatred, humiliation, fear, and many other things through the eyes of the mother and these feelings are all meaningful for him/her. (Agha Mohammadi, 2017, p. 207)

A molecular biologist believes that genetic information provides a framework for human life, i.e., it provides his/her potential to grow to a certain height; his/her predisposition to certain diseases, but other elements like the environment modifies the genetic endowment. At the same time, man’s consciousness allows him/her to go against both his/her genes and the environment. He concludes thus: “Therefore, a child born by cloning would have some similarities to the parent, but it would be his or her own person ... he is going to have to find a surrogate mother to gestate the embryo and fetus. Then this child is going to be born. It is going to be a little boy, who grows up into a big boy, who does not listen to his father.” (Silver, 2001)

If we seriously regard what the opponents say, then in return it can be concluded that since cloning is a modern achievement, people still do not have a clear idea about expecting the cloned child to be the same as the early twin in all aspects. It is only when people will live with those who are cloned that they will find out that cloned people are also humans with free will and that they do not need or cannot necessarily follow the early twin’s model. And one’s environment and other elements are involved in their personal construction.

Moreover, one might say that if the early twin is a famous and important person not only does this fact put the later twin

under pressure but, on the contrary, it gives him/her a kind of self-confidence. This almost follows the line of thought that like the children of important and famous people, they consider themselves to be also important just because of the relationship they will have with that important person. A person whose father is a great scholar may feel accountable to remark on a specific field due to the reputation his father has earned.

Negating man's autonomy and independence

This objection is somehow similar to the previous one, but here the point is that a cloned person will suffer from being subjected to others, while in the former rejection the main point was that clones would not feel as human as others would. The cloned people would be unable to feel full responsibility of their own actions. "Once informed about the way they were conceived; they would inevitably come to believe that the responsibility for their actions falls not on them but on their parents. This belief would undermine the autonomy of the person and his or her status as an "equal member of the moral community." (Mameli, 2007) Man's autonomy is the absolute right in his life. Therefore, any individual's independency and freedom must be respected. It is a principle that no one has the right to deprive a man of his freedom, and no one is allowed to put limits on a man or force him to do or avoid doing something against his consent. (Muhammadi, 2007, p. 69)

According to those who believe that genes control all of man's actions and behavior, and that by choosing someone's genes you can decide his/her character, cloning will cause a violation of man's autonomy. In the above-mentioned assumption, after choosing a group of genes for the clone, they have been deprived

from the other genes that they could have had and, as a result, they have lost the personality that he/she could have had since it has been replaced with another one (Ranjbarian and Seyf, 2009, p. 147). This view is somehow based on genetic determinism, for it is only by such an assumption that we can consider the cloned person to be completely deprived of his autonomy.

Analysis:

First: If the possible mistreatment of cloned babies can legitimize banning cloning itself, then one can say the same should be applied to those cases where children are likely to be mistreated and misused or even sold as slaves, due to poverty or other reasons. This being so, an expectation is that no one can take such a claim into consideration and no one can deprive people of having their children.

Second: Many scientists have rejected the idea of genetic determinism. They say if we accept this, then the same must be said about those who have been born in a natural way, namely their genetic structure must wholly take control of their behavior and conduct. Unless we know that we are not obliged or forced to do things according to our genetic structure, we have the freedom to make our own decisions. Actually, any human being with his/her genetic structure finds some authority internally, and considers himself to have the free will to do or reject something.

Of course, it cannot be denied that the genetic structure of man to be entailed as a partial cause, but this effect is not the complete cause that takes whole control of man. Therefore, the cloned man, like others, has the ability to make choices in life according to his/her will. There is no doubt that he has the potentiality to have a specific character according to his genetic structure, but he can get control of these potentialities based on social or ethical training.

Third: Upon accepting genetic determinism, someone may claim that the genetic structure of the clone can be altered to a better one, so he/she is likely to be a good person and this can be

a supportive factor with cloning.

Nonetheless, genes are not completely in charge of a man's behavior. Therefore, there is no difference between the cloned man and others from this aspect. As a result, someone else cannot be responsible for what the cloned person might do.

Fourth: The same problem can be ascribed to the natural way of giving birth. This is because the child inherits most of his/her genetic structure from the parents; however, this is not considered as taking away the child's freedom and right of authority. Since the child's parents cannot be regarded as responsible for the genetic structure, they have the right to have children, the same should be with the cloned baby.

Excessive expectations from clones

One other psychological pressure upon clones is that there will always be expectations that the parents or others might have from the child, based on the genomic collection that has been chosen and modified. (Ibid, p. 147)

Here the fear is that since the genomic structure has its specific meaning for the parents and others, then they would expect the child to follow the model of the source of the genes. Therefore, they force the child or may have this expectation from them to adopt a certain way of life and then they would deprive them from having the right to have their choice.

Analysis:

First: If the cloned person and the parents realize that the cloned child is not exactly the copy of the cell donor, then the child will have an undefined and unwritten destiny and future in front of them, and the parents would not have extraordinary expectations from their child.

Second: Unreasonable expectations of the parents are not

specific to cloning, and often parents have such expectations from their naturally-born children that they would like their children to follow in their footsteps. Therefore, you cannot say that since they have these irrational expectations from their children, they are not allowed to have a child and the same must be said about cloning.

Dr. Lee Silver, a molecular biologist, is explicit in this way: “Nobody is going to know that the child is a clone, unless the mother tells someone, because all babies look just like babies, and even as the child is growing up, you will never know the child is a clone. Because it just might look like the mother by chance, and it might behave like the father by chance.” (Silver, 2001)

Third: In these counterexamples that are mentioned to reject cloning, the assumption is that the intention is to only clone elites and those people with specific talents, while in many cases there might simply be couples who want to clone their own cells to have their own genetic baby. A child that is not from another planet with extraordinary talents and abilities, but rather a normal healthy child, that due to specific advantages of cloning is not disabled or abnormal. In such a case, the parents see the child to have the potentialities of themselves as a normal human beings and are not likely to have irrational expectations from the child.

Fourth: Even if the parents and others have such expectations, then they must be told that they are wrong; they should revise their view about the child. Instead of putting a ban on cloning, the physicians and other scientists should help parents and society to reach a modified view about cloned people.

In fact, if we succeed in having cloned people in society, at the beginning they might be considered as heroes because of what has been depicted in movies and science fiction. However, they will soon start to realize that even the cloned ones are normal and then they will modify their view and expectations of cloned people.

There have been many scholars who wished that their children followed in their footsteps, but despite encouragement coming

from the family, relatives and others, they decided to choose their own way of life. The cloned man, in a similar way, because of the free will they have, is capable to figure out his/her own life. Expectations will also exist for a normal child, and free will in both cases enables the child to make his/her own decisions.

The opponents say that even though the child has the right to resist the expectations of others and direct his/her own life, the pressure does not let the child make a decision due to their talents and potential, and they are likely to do something just to prove his/her own authority.

Besides what has been mentioned above, it can be said that encouragement coming from others can help a person have a strong motivation to follow the model of the early twin and to help serve the community. This is especially if the early twin was a gifted person, then those potentialities are in the cloned man as well. Therefore, the cloned baby can deliver great services to both himself and the community as long as they have autonomy in their life.

Another fact is that the cloned child almost knows his/her talents by studying the life of the early twin, and this can better help him find his/her life goals without wasting a lot of time and energy to find out what he/she is good at.

The opponents continue saying that these physiological pressures will be intensified when one person is copied through SCNT. In this instance, we will face the problem of “multiple clones.” Man’s feeling of his/her individuality to some extent is due to their specific physical appearance. This is a fact used by others also to identify someone. The existence of multiple clones will cause problems with this. (Muhammadi, 2007, p. 70)

To recapitulate, it can be pointed out this problem is not inherent to cloning, rather it refers to multiple cloning. In addition, one may ask: Why should some people who are identical or replicas have problems with their individuality? Do identical twins have

problems with their identities? Someone might say that if one of these identical twins commits a crime, for example, then this can cause a problem for others as well. Still even if it would be well-accepted, this is still another issue and has nothing to do with man's image of himself as an individual.

Conclusion

In this article, some objections that are raised against human reproductive cloning are discussed, followed by discussions concerning its psychological problems. It is said that it does not cause identical ambiguity in many cases; it could be done within the family framework or other possibilities, and then the child's history can be preserved. In consequence, the child will not suffer from not knowing his/her lineage.

Another problem was the negative effects of knowing your future. This reason is not enough to prohibit cloning since we know there are many counterexamples of natural procreation about which no one has said that the couple should not have a child. Even the cloned person by having such information has the possibility of taking care of some diseases much earlier. This will hold true if the correctness of the claim is accepted at the very first place. The third objection was creating a man without individuality and identity. It was suggested that cloning does not necessarily entail ambiguity for the clones.

The claim that by divorce of the parents psychological damages afflict the clone was responded by four points. The fifth argument was procreation of second-order humans. Actually there are ways to avoid this consequence, besides it is not to happen in all cases of cloning.

Negating man's autonomy and independence is the sixth objection. It is said that the possible mistreatment of cloned

babies cannot legitimize banning cloning itself. Besides, it entails accepting genetic determinism and even to accept it does not necessarily prove the claim.

The last problem addressed is the excessive expectations from clones. The answer is that these unreasonable expectations of the parents are not specific to cloning and can be applied in natural procreation. In addition, after living with the clones, people will begin to rationalize their view towards the clones as normal beings.

Finally, it must be borne in mind that many criticisms against cloning do not refer to the nature of cloning, rather they concern its being practiced on a large scale.



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