

# Good essay about advantages of embryonic scientific research

[Technology](#), [Development](#)



Introduction Embryonic scientific research offers optimism for innovative therapies, but their research has always been debated. Various countries regulate such research in different ways as the subject still carries a divided opinion. What makes the topic of use of embryos so tricky to resolve, and is it so tough to resolve the issues? The research use of human embryos is currently a high ethical and political agenda in many countries. Despite the possible benefit of the research, their use is contentious because they are derived from early embryos. In this essay, some of the ethical issues surrounding the use of human embryos are addressed.

Human embryonic stem cells have an important clinical potential. These supercells represent relief for the future generations as they can help cure of a wide range of common disabilities. The replacement of defective cells with embryonic stem cells derived equivalents can help restore normal function. These 'Stem cells' are primitive cells that carry the ability to give rise to more identical stem cells or specialize to develop somatic tissues. In the adult individual, a number of tissues have been found to harbor stem cell populations, for example, skeletal muscle, brain, umbilical cord blood, etc. The most important potential use of stem cells is in transplantation medicine and the development of cell replacement therapies. Examples of diseases that could benefit from embryonic cell-based therapies include multiple sclerosis, Parkinson's disease, stroke, spinal cord lesions and heart failure (Embryonic Stem Cell Research).

The ethical dilemma In the recent years, the journal of Medicine and many others have walked into the debate about embryonic stem cell research. The debater would not have existed if the embryonic stem cells could be

harvested without harming the embryos or from embryos that are lost in spontaneous abortions. The ethic lies in destroying human embryos deliberately for the objective of harvesting their stem cells (George and Lee).

When does a human being start existing in an embryo?

The main argument against killing embryos for research is that human embryos are human beings. However, the issue of when life begins to exist in the embryo is a contested one. The standard view is that the life begins with the emergence of the one-cell zygote. At this stage, the human embryos carry full potential to growth into adulthood and have their identity fully intact. Still, the moral eminence of the embryo is a complicated issue as there are many different viewpoints. Many are of the view that the embryo has a complete moral standing right after fertilization, and these views carry different perspectives. Not all persons can rightfully assert that they began their life as a zygote as the growth from a fertilized egg is an incessant process. The answer to the question that if embryos are human beings, it is yes, and indeed they are. There is no doubt about it, and the self-directed processes from the embryonic stage pass on to fetal, baby, child, and adult stages of human development (George and Lee). Each one of us was once an embryo. Many scientists and philosophers defend embryo-killing on the grounds that killing a few thousand embryos today can help prevent suffering among millions of patients in the future. Others argue that there no wrong being done in destroying “ spare” IVF embryos that would remain permanently frozen or discarded. There is a stream of scholars who are ready to reject that human embryos are human beings. It’s hard to isolate when life actually begins. The embryo does not carry the physical or

psychological properties that can be associated with a person. Moreover, the embryo cannot further develop into unless it is placed in a uterus of a woman. One view state that something that carries the possibility to become an individual should not be handled as if it were a human being. The opponents contend that although the embryo does not have the qualities of a person at current stage, it would become an individual, given a chance and should thus be given the respect and dignity of a person.

Many people contend that a human embryo justifies appropriate protection from about 14 days after fertilization as it can now no longer divided into twins. Before this stage, it could split to become twins, or even fail to progress at all. During the first 14 days, there is no vital nervous system, and thus the embryo has no senses (Lo, Bernard, and Parham, 204-13). Another argument that goes in favor of using embryos in scientific research is that if organs from patients who are in coma or brain dead, can be used for transplants, then, similarly, there is no harm in using embryos that carry no nervous system for research purpose.

There are three important questions related to stem cell research, and these are if embryonic stem cell research should be allowed in the first place, should it get funded by the government, and does it matter if the stem cells are removed from the already existing embryos left over from fertility treatments or from the cloned embryos (Sandel). The first question remains the most fundamental. The main opposition to embryonic stem cell research is that it is morally objectionable to destroy a human embryo, even in its initial stages of development.

When science moves at a faster pace than moral understanding, the society

struggles to overcome their unease. Scientists may soon be able to remove stem cells from an early embryo that can help them study the growth in those cells as well as to cure degenerative diseases.

Opponents to embryonic stem cell research maintain that the research is immoral as it is like killing one person to treat others. There is yet another group of opponents that supports embryonic stem cell research, if the research makes use of spare” embryos left over from fertility clinics. They do not agree with the deliberate creation of embryos for research. Some people argue that there is nothing wrong with using spare embryos for research.

The paradoxical scenario brings out the error in the negotiated position. For example, those who are pitted against the making of embryos for stem cell research, but see no problem with research on IVF “spares” get deviated from the issue of morality. Looking at the other side of the end, if it is acceptable to create and sacrifice of embryos in IVF, why isn't the conception and destruction of embryos for stem cell research acceptable too? The moral difference here is that a large number of embryos in IVF are created because the fertility doctor does not know which embryos will develop ultimately and does not mean to destroy any of them. However, in case of making embryos for stem cell research, they have been created with the purpose of destroying and carry out research. A recent study found that millions of frozen embryos are languishing in fertility clinics. Hence, nothing is lost, but only gained, if these embryos are used for research (Sandel).

## Conclusion

Breakthroughs in genetics offer us many promises that can help treat and check a number of devastating diseases. The difficulty is that the recent

genetic information may also enable us to manage our own genes and tamper with life. The question related to embryonic scientific research has been high on the political and ethical agenda in many countries. The UK was first to pass laws related to the utility of human embryos for research.

Whoever is more right about the moral status of the embryo, one thing is sure and that is, the challengers of research cannot have it both ways. They cannot approve the creation and annihilation of extra embryos in fertility clinics, and at the same time protest that making embryos for research medicine is ethically objectionable (Sandel).

There are IVF embryos that are created for the purpose of research and stem cell isolation. It has even been reported that the most radical choice would be creating embryos specifically for the research purpose of isolating stem cells via 'nuclear transfer'. However, there are still scientific challenges to overcome in the field of stem cell therapy before it can become a clinical practice. Considerable research will be required on how to transport stem cells to the suitable site in the patient to ensure that they survive. There are researches going on in the potential alternatives for therapeutic cloning for the research that would not require human embryos.

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