Mary Regina Bolgiano

17

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Notre Dame Preparatory School

The Moral Implications of Therapeutic Cloning

The ethical debate regarding therapeutic cloning is a pivotal battle within the war against traditional family values. This struggle has continued for centuries. If the supporters of traditional family values lose the battle of therapeutic cloning, the death toll has the possibility of reaching a great number. Numerous but nameless human lives will be destroyed before their births. Science might find cures for diseases; however, the sanctity of human life will be lost.

Therapeutic cloning is a divisive issue, and thus has two very different definitions. At the most basic level, the term therapeutic cloning is used to differentiate from the term "reproductive cloning, in which the goal is to make a baby that is identical to the parent" (Pollack). The process of therapeutic cloning ends before the embryo is transferred into a mother's uterus. According to Ian Wilmut, the leader of the team that cloned the sheep named Dolly, the controversy surrounding therapeutic cloning "concerns the nature of the blastocyst from which stem cells are derived. [It] is a ball of cells smaller than a grain of sand. . . .While it has the potential to become a person, it lacks the fundamental human characteristics of being conscious and aware" (Wilmut). Conversely, Bishop Wilton D. Gregory states that scientists who support therapeutic cloning "want to treat the resulting human beings as subhuman, creating them solely so they can destroy them for their cells and tissues" (AmericanCatholic.org). Bishop Wilton Gregory and Ian Wilmut define therapeutic cloning from two very different standpoints. Wilmut, a scientist, believes that consciousness is a requirement for a human to be alive, but Bishop Gregory considers a blastocyst to be a human being.

What is the process of therapeutic cloning? When both scientists and ethicists speak of cloning they describe the process of "replacing a human being (asexually) by

stripping an unfertilized egg of its nucleus, thus removing its genetic material, and fusing it with an adult human cell" (Schaeffer). Next, the egg and adult human cell is "grown for about five days until it is an early embryo. . . . Stem cells can then be recovered from the interior and spurred to give rise to specialized cells or tissues that carry the DNA of the donor" (AP). Scientists hope that the stem cells can grow into specialized cells which will then act as therapy or even cures to diseases such as "Parkinson's disease, diabetes, stroke, Alzheimer's disease and spinal cord injuries" (Wilmut). According to Wilmut, treatments and cures to many diseases "can—and can only—become available through stem-cell cloning" (Wilmut). On the other hand, Bishop Gregory argues that "while cloning may never produce any clinical benefit, its attack on human dignity has already begun" (AmericanCatholic.org). In this case, Bishop Gregory is not only more truthful but also more logical, because presently no treatments have been discovered through the process of therapeutic cloning.

Yet, there have been several recent advancements in the field of therapeutic cloning. In 2004, a team of South Korean scientists first cloned a human embryo and one year later they "improved, by more than tenfold, their efficiency at culling these master cells, thus making pursuit of therapeutic cloning more practical" (Neergaard). First, the researchers collected eggs that were donated by volunteers, removed the nucleus of each egg, and then inserted into the egg the DNA from skin cells of eleven patients of various untreatable diseases, including spinal cord injuries. Then, thirty-one blastocysts grew successfully. The team of South Korean scientists must next learn how to control the development of the cells in order to make further advancements with therapeutic cloning

(Neergaard). Whether they will be successful in finding treatment for many diseases or not remains to be seen.

Additionally, Harvard University scientists began conducting research into therapeutic cloning in 2006. Scientists from Harvard, the second American university to begin such research, state that "the privately funded work is aimed at devising treatments for such ailments as diabetes, Lou Gehrig's disease, sickle-cell anemia and leukemia" (AP). Dr. Leonard Zon of the Harvard Stem Cell Institute said that Harvard was "setting the bar for the rest of the world" (AP). There have been restrictions on any government funding for therapeutic cloning; however, no federal law prevents privately funded research to be pursued. The controversy over Harvard's decision continues in the United States. For instance, Reverend Tad Pacholczyk of the National Catholic Bioethics Center in Philadelphia, is against Harvard's research, because it is "making young humans simply to strip-mine them for their desired cells and parts. . . . [It is a] project that cannot be made moral, no matter how desirable the cells might be that would be procured" (AP). Although Harvard has a vast fund, other American scientists who lack funding travel to other countries, such as South Korea, to take part in therapeutic cloning research opportunities (Pollack). Therefore, the controversy in the United States is often centered on increasing or limiting government funding.

In November of 2007, Kyoto University's Shinya Yamanaka and molecular biologist James Thomson "reported that they had reprogrammed regular skin cells to behave just like embryonic stem cells" (Mahr). The skin cells "incorporating four specific genes known to play a role in making cells versatile, or pluripotent," displayed properties of embryonic cells when tested on mice (Leshner and Thomson). One day, scientists

might use this procedure to avoid the controversial destruction of embryos but still create stem cells. This breakthrough led to a statement by George Daly, a researcher at the Harvard Stem Cell Institute, who "called it 'just a spectacular, spectacular advance. It will change everyone's thinking about the field'" (qtd in Lefkowitz). Similarly, Ian Wilmut, the Scottish researcher who cloned Dolly, "told the *Daily Telegraph* he would no longer pursue cloning to produce stem cells, making use instead of this new and wholly uncontroversial method" (Lefkowitz). In response to the morality of destroying embryos, James Thomson, a renowned stem-cell researcher in the United States, said "If human embryonic stem-cell research does not make you at least a little bit uncomfortable, you have not thought about it enough" (Lefkowitz). "Discomfort with the notion of extracting stem cells from embryos is understandable. But many of the life-changing medical advances of recent history, including heart transplantation, have provoked discomfort" (Leshner and Thomson).

Despite this recent advancement and President Bush's veto of the Stem Cell Research Enhancement Act, scientists, including Thomson, continue to support research that is harmful to embryos. In *The Washington Post,* Thomson wrote, "Federal funding is essential for both adult and embryonic stem cell research, even as promising alternatives are beginning to emerge" (Leshner and Thomson). In 2002, the United States "took the position that a global and comprehensive ban is needed against creation of cloned human embryos for any purpose" (state.gov). President Bush supported this position and said that "anything other than a total ban on human cloning would be unethical. Research cloning would contradict the most fundamental principle of medical ethics, that no human life should be exploited or extinguished for the benefit of another" (State.gov).

Despite this decisive position, a possibility remains for it to be changed in the future. Meanwhile, therapeutic cloning and embryonic stem cell research continue through private funding in the United States (Leshner and Thomson). While the government's position on cloning is ethical, the debate on embryonic stem cell research and therapeutic cloning continues with a concrete possibility that government funds could be opened to embryonic stem cell research.

Clearly, therapeutic cloning is immoral because it is a process that creates a human life for the purpose of using a human's cells and then killing the human embryo. The United States government's path is clear: its moral duty is to protect its defenseless citizens. Government funding should only go into moral research, specifically adult stem cell research and the innovative procedure of turning skin cells into embryonic cells. Thus far, therapeutic cloning research, including the research by the South Korean and Harvard scientists, has produced no results. Even if therapeutic cloning proved to be a panacea, the ethical dilemma would still stand and could not be ignored. Destroying one person's life to treat the disease of another person can never be justified. Ethical thinkers are not tempted, like scientists, by the glory of discovering new technologies and therapies. Rather, they avoid the "'risks [of human cloning of] being the tragic parody of God's omnipotence'" (qtd in Schaeffer) and bravely draw a line to protect the dignity of human life.

The war against traditional family values is ongoing and may escalate in the future. In The Abolition of Man, C.S. Lewis argues that scientific progress that is unfettered by moral principles will ultimately destroy the human race. Many do not grasp the importance of the issue of human cloning and embryonic stem cell research and its

significant role in human history. Truly, today is a crucial time for deciding the direction of humanity's future. Scientific progress will never result in justice and peace in the world unless the dignity of human life is protected.

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