

Embryonic Stem Cell Research: Public Opinion and Federal Policy

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Although stem cell research has potential to uncover treatments and cures for many of the most devastating and debilitating diseases that plague human beings, the debate concerning federal funding for embryonic stem cell research proves an emotional, moral dispute between the advancement of science and the sanctity of human life. The current United States policy for embryonic stem cell research funding underwent much discussion and dispute during the contentious 2004 Presidential Campaign, as the two prominent political contenders used opposite sides of the stem cell issue spectrum in hopes of garnering political support. Despite the probability of the misuse of the stem cell debate as a political tool, this controversial issue continues to divide our nation and deserves open, public discussion. With billions in grant money generated from taxpayers dollars distributed every year through the National Institutes of Health (NIH), many citizens and policymakers demand that national policy ban federal funding for this controversial research, which violates the ideas of morality and of appropriate treatment of nascent human life for certain individuals. During an attempt to understand the advantages and disadvantages of stem cell research, issues arise concerning public opinion, existing stem cell policy under the current administration, and the possibility of future alterations of federal funding and of government limitations with the election of a new president. Notwithstanding political affiliations, personal opinions concerning stem cell research must be concluded from an individual effort to reconcile values and morals with scientific advancement to find a proper balance in the struggle to improve the quality of life for mankind.

Both advantages and disadvantages of the stem cell policy debate arise from the question of federal funding for embryonic stem cell research. Undoubtedly, the majority of dissension concerning stem cell research originates from issues of morality. Many individuals claim that embryonic stem cell research is immoral or unethical. U.S. Representative Dick Armey, House majority leader, claims, "Taxpayer funding of this kind of research

is objectionable because it is tantamount to allowing our government to exploit and destroy human life for its own or someone else's purposes. Federal tax dollars would be used by the government to 'own' a vast supply of living human embryos. The idea of the government 'owning' human beings is disturbing" (Armey 1). Whether stemming from religion or values, many citizens oppose embryonic research because of concerns from the possibility of destruction of human life found inside embryonic stem cells.

Another concern stems from the slippery slope associated with providing funding and, as a result, lessening restrictions of stem cell research. With the funding and acceptance of the usage of embryonic stem cells from *in vitro* fertilization, some fear the inevitability of funding demands for the creation of embryos only for research. According to Richard Doerflinger, an official with the United States Conference of Catholic Bishops, stem cell research epitomizes the slippery slope in action. He states, "Once clinics get used to the idea of research on spare embryos, they will become desensitized enough to consider creating embryos solely to be destroyed" (Zitner 2). Despite governmental restrictions on the public sector, a private team at Jones Institute for Reproductive Medicine in Norfolk, Virginia announced the production of human embryos exclusively for the purpose of stem cell research. Since the government has no regulation over privately funded research, it can only create taboos for embryonic stem cell research in the public sector through limitations on funding.

An additional disadvantage of embryonic stem cell research comes from eliminating the possibility of adoption as an alternative to the destruction of unused fertilized eggs from *in vitro* fertilization. During the U.S. House of Representatives Hearing of Opportunities and Advancements of Stem Cell Research, opponents of federal funding for embryonic stem cell research used three children created from the adoption of previously fertilized eggs. Through the Snowflakes Program, adopting parents can receive unused

embryos from genetic parents gathered from previous attempts at *in vitro* fertilization. This embryonic adoption division of Nightlight Adoption Agency matches embryos such as Hannah, Mark, and Luke with hopeful parents. Hannah's mother states, "Looking into Hannah's eyes, I weep for the roughly 188,000 frozen embryos like her placed into frozen embryo orphanages, who could be adopted, rather than terminated with assistance from *my* federal tax dollars" (Streng 5). Although the Snowflakes Program has currently yielded only thirty-one children, opponents of embryonic stem cell research use this as argument to refute supporters of federal funding.

Even with these disadvantages, embryonic stem cells are beneficial because the cells are totipotent or capable of becoming any cell type in the body. Also, embryonic stem cells, unlike adult stem cells, generate abundantly in an unspecialized state before research or application (NIH Online). Adult stem cells are of lower quality, are difficult to locate, and contain DNA abnormalities, unlike embryonic stem cells. While adult stems cells do hold certain advantages, such as a small possibility of rejection when inserted into the body, the applications and flexibility of embryonic stem cells far outweigh those of adult stem cells. Many scientists do not consider either adult stems cells or umbilical cord stem cells as a satisfactory alternative to embryonic stem cell research. In fact, most scientists consider research on all three stem cell types as essential for developing promising cures and treatments for debilitating diseases.

Also depicting the advantages of embryonic stem cell research, individuals currently battling debilitating diseases share personal, heart-wrenching stories in support of funding for embryonic stem cell research to discover a cure for their daily miseries. During the U.S. House of Representatives Hearing of Opportunities and Advancements of Stem Cell Research, the struggle of a five-year-old child, Mollie Stringer, pleads for funding to discover a treatment of juvenile diabetes through embryonic stem cell research. The testimony claims, "So far, I [Mollie] have had 21,000 shots and 28,000 finger pokes...If these cells will never be human life, then maybe the most moral thing to do is find out if these cells can save lives rather than simply throw them out" (Singer 1-

2). Embryonic stem cell research could provide promising treatments for children like Mollie. Joan Samuelson, President of the Parkinson's Action Network (PAN) also testifies during the hearing as one of more than one million Americans who suffer from Parkinson's disease. She claims, "Each day that the government upholds the ban on federal funding for embryonic stem cell research a choice is made to ignore the millions of Americans suffering from debilitating diseases" (Samuelson 5). Embryonic stem cell research holds the potential to improve the quality of life for individuals already suffering with these devastating diseases.

As the use of embryonic stem cells from *in vitro* fertilization reveals the possibility of improved treatment for a number of debilitating diseases, many Americans support embryonic stem cell research. A testimony from U.S. Senator Orrin G. Hatch, states, "I think that support of this vital research is a pro-life, pro-family position. This research holds out promise for more than 100 million Americans suffering from a variety of diseases including heart diseases, multiple sclerosis, Parkinson's, Alzheimer's, ALS, cancer, and diabetes" (Hatch 1). Discarding fertilized eggs or keeping them frozen until disintegration appears as irrational as discarding healthy organs rather than transplanting them. U.S. Representative Henry A. Waxman professes, "Embryonic stem cell research is needed to help with diseases and disabilities. I believe that it is not only ethically permissible to do stem cell research; it is unethical not to do it...I do not believe that the government should abandon potentially life-saving research in order to give a cell—a special cell, but only a cell—the same rights and protection as a person" (Waxman 1). Moreover, in a testimony before the Senate, the late actor Christopher Reeves, a strong proponent of research, once questioned, "Is it more ethical for a woman to donate unused embryos [for research]...or let them be tossed away as so much garbage when they could help save thousands of lives?" (Zitner 1). As Americans attempt to find a balance between differing aspects of morality and scientific advancement, the debate of embryonic stem cell research proves unavoidably controversial.

While the public discusses this controversial issue in light of the formation of public policy, politicians use embryonic stem cell funding as a

portion of their political platform in attempt to garner support from the American public. President George W. Bush serves as an opponent of embryonic stem cell research and considers the destruction of human embryos as morally wrong. During one of his public remarks concerning stem cell research, he stated, “Embryonic stem cell research is at the leading edge of a series of moral hazards” (Bush 3). These “moral hazards” concern the possibility of human cloning eventually resulting from methods derived during embryonic stem cell research. In August of 2001, President Bush limited federal funding to 60 “supposedly” existing stem cell lines, of which only 19 contaminated lines truly exist, thus banning all additional public funding. “This law effectively prohibits the use of federal funds to support any research that destroys human embryos, or puts them at serious risk of destruction” (The President’s Council on Bioethics 3). Bringing his personal religious views into his political decisions, President Bush claims, “I also believe human life is a sacred gift from our Creator. I worry about a culture that devalues life, and believe as your President I have an important obligation to foster and encourage respect for life in America and throughout the world” (Bush 3). President Bush, acting as a beacon of Christian values and morality, gathers support from likeminded citizens with his “effort at a moral solution.”

Standing on the opposite side of the stem cell debate, U.S. Senator John Kerry actively supports federal funding for embryonic stem cell research. During the 2004 presidential contest, Senator Kerry pushed the stem cell research debate further into the political arena by making it a prominent aspect of his political platform. Senator Kerry claimed that embryonic stem cell research holds broad bipartisan support with 58 Senators and 206 members of the House of Representatives signing a letter urging President Bush to expand federal funding. Senator Kerry stated, “Ideological blinders are preventing Bush from attempting research into treatments for deadly debilitating diseases” (Washingtonpost.com 1). Such limitations on funding, rooted in misinformation, stifle the United States position as a leader in biomedical research. In his campaign platform, Senator Kerry declared, “As president, John Kerry will overturn

the ban on federal funding of research on new stem cell lines, and he will allow doctors and scientists to explore their full potential with the appropriate ethical oversight. Patients and their families should no longer be denied the hope that this new research brings” (Johnkerry.com 2). With his election, Senator Kerry promised to restore America as a haven for innovators and optimists with dreams to explore scientific advancement to improve the quality of human life.

Although politicians utilize the embryonic stem cell research debate as a political tool, this issue must be openly discussed to increase understanding. The NIH guidelines permit the research of embryonic stem cells solely from the increasing number of unused, previously fertilized eggs remaining in storage. The genetic parents of these unused embryos have four options. Parents can decide to discard the embryos or leave them in storage until deterioration. In two additional options, genetic parents can place the embryos in an adoption facility or allow scientific research on the embryos. Although embryo adoption might appear to be the most plausible solution, genetic parents rarely find adoptive parents for the fertilized eggs. In reality, thousands of embryos are routinely destroyed each year. In regards to personal convictions and moral dilemmas of the individual, the genetic parents should informatively and methodologically determine the destiny of embryos.

The government could strictly monitor the practices of public research through federal funding, thus ensuring ethical procedures in embryonic research. Funding for scientific research on these unused embryos holds the potential for helping billions of humans suffering from incurable diseases. The government should not refuse research for treatments of these debilitating complications when over four thousand Americans die daily from major diseases. Are the “potential” lives in storage at a frozen clinic more important than stifling the suffering of humanity? While discerning between differing aspects of morality and scientific advancements proves rather difficult and emotional, all Americans must personally evaluate the morality issues stemming from this issue to conduce an opinion in hopes of influencing public policy for funding. After developing informed, reflective opinions, Americans must

pronounce views concerning the balance between morality and scientific advancement through the democratic process of interest articulation, conducted via the policymaking power of our elected representatives.

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