

## **The exorbitant price of embryonic stem cell research**

### A Pastoral Letter from the Catholic Bishops of Kansas

**Introduction.** In 2006, voters in Missouri approved an amendment to their state constitution prohibiting the legislature from regulating or limiting research in which human embryos are created and destroyed to provide stem cells for research. This amendment disregards the most fundamental human right of those who are most defenseless – their right to life.

Shortly after the results of the Missouri vote were announced, Governor Sebelius publicly referred to the new amendment as “a step forward to at least ensure in Missouri that research can continue.” She went on to say that she thinks “there is a lot of interest in looking at that kind of language here in Kansas.”

Concerned at such a prospect, we want to offer Catholics and all people of good will in Kansas the following explanation of the issues at stake in human cloning and embryonic stem cell research. It may provide some clarity amidst the confusion.

**What is a stem cell?** Stem cells are primitive human cells that, when they divide, can form a variety of more specialized cells. For example, just one type of stem cell in our bone marrow works to replace all the different types of blood cells (white, red, etc.) when we need them.

**Adult stem cell research.** Human stem cells hold great promise for the development of therapies to regenerate damaged organs, and to heal people who are suffering from terrible diseases. Most scientific research uses cells obtained from adult tissue, blood from the umbilical cord, and other sources that pose no moral problems. Versatile stem cells have been found in bone marrow, blood, muscle, fat, nerves, amniotic fluid, and even the pulp of baby teeth. Many successful therapies have been developed using these adult stem cells.

We Catholics applaud the vast array of scientific research that is conducted ethically and that respects the dignity of the human person. We strongly support stem cell research using adult and umbilical cord stem cells.

**Embryonic stem cell research.** Some scientists, however, are interested in doing research using stem cells obtained by killing human embryos when they are about one week old. These embryos are obtained from one of two sources.

In vitro fertilization. Embryonic stem cell research commonly involves harvesting cells from human embryos created in a laboratory by “in vitro” fertilization. The embryos created are frozen and stored for future use. For various reasons, not all the embryos are used. Some people consider these “leftover” embryos as a potential resource for scientific research. This is a morally unacceptable process on many grounds, and the cell harvesting process itself destroys the living embryo.

Human cloning. Embryonic stem cells might also be harvested from embryos created by cloning, also known as “somatic cell nuclear transfer” (the same process used to create Dolly the sheep). In human cloning, the nucleus from an adult donor cell is inserted into a donated egg cell from

which the nucleus has been removed. The inserted nucleus provides the necessary DNA for the new cell to function and divide. The resulting human embryo is allowed to grow for several days, then destroyed to obtain stem cells for experimentation.

Some would distinguish between “therapeutic” cloning and “reproductive” cloning, but the process is the same in both cases. The only difference is what is done with the new embryo created by the cloning process: implant it in a woman’s womb to attempt a live birth; or destroy it to harvest its stem cells. Thus far, however, despite many years of experimentation by scientists all over the world, all attempts to use human cloning for either “so-called” therapeutic or reproductive purposes have failed.

**Serious moral problems: destruction of human life.** Some hold there is no moral problem with harvesting cells from embryos because they claim that the embryo only holds the potential for human life and is not actually human. But the human embryo is not something other than human; human stem cells can only be harvested from a human being. It is just that this human being was killed instead of allowing it to develop normally. Regardless of whether the human embryo is obtained from “in vitro” fertilization or human cloning, human life is destroyed for the sake of scientific research, in the search for (as yet purely hypothetical) medical therapies. This is a crime against life. It is never morally permissible to destroy one human life, even if it is done in the hope of benefiting other human beings. Laws intended to sanction embryonic stem cell research are immoral because they give legal protection to the violation of the most fundamental of all human rights.

**Serious moral problems: pragmatism.** Embryonic stem cell research focuses on the advance of science and the potential of curing diseases, but to the detriment of human life and dignity. Some even say this is a small price to pay for the economic development of Kansas: if we do not permit and promote embryonic stem cell research, they say, we stand to lose the economic benefits promised by the biotechnology industry (a similar argument was used by proponents of slavery, who said that certain states could not survive economically without this despicable institution). Such claims are baseless, as other states and countries that ban human cloning have taken a leadership role in the development of biotechnology. The primary question is whether embryonic stem cell research can be pursued without harming another human being, and our own humanity in the process. The answer to this question is quite clearly “no.”

Some proponents also argue that if the frozen embryo is going to be killed anyway, what can be wrong with using them for the benefit of others. This line of reasoning is flawed. A death-row prisoner, a terminally ill patient, and indeed each living person will die one day, but that does not entitle another to kill human life at will for the purposes of scientific experimentation. What is more, in the case of frozen embryos, they would survive if someone had not decided to give them over to be killed for research purposes, instead of implanting them in their mother’s womb.

**Serious moral problems: victimizing women.** Women, too, are victimized by the promotion of embryonic stem cell research. The process of cloning human embryos for research requires a huge number of female eggs. There is a certain amount of inconvenience, pain and substantial health risk associated with the process for harvesting eggs. For this reason, it is likely that only

women driven by need (typically the poor, including ethnic minority women, students, and women from developing countries) would donate the eggs needed for experimentation. Advance in research and finding cures for disease would be achieved at the expense not only of human beings at their earliest stage of development, but also of women in desperate circumstances.

**Conclusion.** Each of us was once an embryo. This affirmation is based on a clear grasp of the most basic biology, not on religious faith. Once human life begins (which always occurs at fertilization, or at an event that mimics fertilization, like cloning), this new living being is a member of the human race who is worthy of respect and protection from harm threatened by embryonic stem cell research. The human embryo has such a claim on all of us.

As Catholics, our opposition to embryonic stem cell research is also confirmed and strengthened by our faith. We believe that God became man in the womb of the Virgin Mary, going through all the stages of prenatal human development. This religious truth elevates the dignity of human nature above that of even the angels and sanctifies human life from its beginning at conception to natural death. And if that were not enough, the sacrificial death of Jesus on the cross communicates the height and depth, the length and breadth of the love God has for each of us. Jesus, the Son of God, gave himself up to death, shedding his last drop of blood, because each individual human life created by God is of incalculable worth.

How can we value so little what God values so much?