Moral Implications in Embryonic Stem Cell Research

Human embryonic stem cells are immortal and have unlimited capacity. Naturally, controversy surrounds the use of embryonic stem cell research. In order to understand the controversy, a quick explanation of the process is provided.

Human embryonic stem cell (hESC) lines can be derived from preimplantation blastocysts donated for research. Embryonic stem cells are obtained from embryos prior to implantation. Each of the cells are undifferentiated, which makes stem cells so unique - theoretically, they can become any tissue in the body.

Embryonic stem cell research (ES) has been described as one of the most significant breakthroughs of this century in biomedicine. (Savulescu, 2000) The benefits of ES include gene therapy and the generation of replacement tissue and organs for transplant. With further ES, drug companies could test their products on stem cell lines to determine unexpected tissue problems. Deaths which have resulted from unexpected consequences of drug interactions could be prevented if ES testing was done.(Rolletschek A., 2004) Another important ES proposal would use ES cells to study early events in human development. Placental abnormalities, congenital birth defects and other unexplained events in early human development could be studied using ES.(J.A., 2000)

The benefits of ES are easy to discuss. Little controversy surrounds the potential benefits. Most controversy lies within the moral realm. Is it moral to use embryos to

advance science? Is the moral issue moot at this time? The remainder of this paper will discuss address this issue.

The moral argument already been fought and decided. The United States Supreme Court, in its *Roe V. Wade* opinion, may have provided the answer. (Wagner, 2000) A woman may terminate a fetus prior to the first trimester pursuant to the advice of the treating physician. Since the Supreme Court allows for the termination of the embryo well beyond the blastocyst stage of development, it follows that the developing embryo, up until the first trimester, exists at the discretion of the mother and her physician. This point alone likely justifies, on a strictly legal analysis, the continuation of ES research. If a woman can terminate a developing fetus, there legally is no reason why she can not donate her non-implanted, fertilized egg. Would not any attempt to limit the woman's discretion with her embryo also be an attempt to make a back door attack on the 1973 Supreme Court decision in *Roe, supra*? The *Roe* Court made its decision without regard to the morals, motivations or ethical behavior of the mother.

Concurrent with the Supreme Court, society has approved of the disposal of embryos. Little outrage is heard about the discarding of human embryos used in fertility clinics. Most embryonic stem cells currently used for research come from fertility clinics. Frozen embryos that are not used for fertility were traditionally provided for ES. In short, embryos used for ES were earmarked to be destroyed without public outrage. Is it different since the embryos will be used for science? Is there a moral difference between letting the embryos waste and causing their destruction through ES? Is one more moral than the other? It would be hard for one to argue that ES should be banned, while acknowledging the permissive practice of fertility clinics and the current state of abortion law. To remain morally consistent, one must be against all. For those against abortion, the highest court in the land had ruled. For those against freezing excess embryos to assist those who wish to have a child, society has decided on this practice also. This does not negate the moralists' argument; rather it shows they may have fewer successes with ES than with abortion.

The moral argument with regard to human embryos, regardless of its validity, has consistently been disregarded in favor of other moral values. In the case of abortion, the limited right of the mother to choose has superseded the embryonic rights. In the case of frozen embryos, the rights of the parents to have children have prevailed. As a society, we are consequentialists. The abortion laws reflect this. The laws are strict regarding abortion when the fetus is viable, less strict when the fetus is in the first trimester. This reflects a greater society belief. For example, when an elderly person dies at the sunset of life, we understand. When a person dies at the prime of life, we believe this to be wrong. When a child dies, we call it tragic. Sudden infant death syndrome is more tragic than an early miscarriage. When an embryo in a fertility clinic expires, it receives a less ceremonious burial than a household pet. We attach different intrinsic values to life.

Even though one may argue that human embryos exist has human life, it can be argued that the intrinsic value, which appears to lie somewhere between no life and an early miscarriage, is outweighed, by a moral point of view which focuses on the benefits to human life that ES will bring. This is no different than the calculations made regarding abortion and embryos used for fertility clinics. The issues involving ES are not new – society has addressed them. Those who argue in favor of the sanctity of human life serve a valuable function to help guide the ethics of future research. ES should continue, but, as with any area of developing scientific discover, should continually be under ethical scrutiny. We should continue to respect and learn from the opinions of those who disagree.

The debate over whether we should have ES has been decided in other arenas and is not new. We should now turn our debate to the uses and methods of ES. In this debate, the moral objectors should prove valuable in shaping policy. As Albert Einstein said, "Science without religion is lame. Religion without science is blind."

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