

The Ethics of Human Embryonic Stem Cell Research and Medical Cures

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Although embryonic stem cell science was found much later than adult stem cell science (first human embryonic stem cell (hereafter, hESC) line derived in 1998), when 'stem cells' are mentioned some of us may assume that they are embryonic stem cells (ESC) and some may even be reminded of 'ethics' Now that adult stem cell research and treatment have become more active and visible in the last ten to twenty years, there is a popular dichotomy between 'ethically questionable' embryonic stem cell research and 'ethics-free' or 'ethically safe' adult stem cell research in the public domain. However, the ethical debate on human embryonic stem cell research is more than the question of whether or not embryos are human. This article aims to go beyond this dichotomy by discussing the complex issues of this debate, which are simply not black and white.

The moral status of the embryo is a controversial and complex issue, and there is a wide spectrum of different views on this issue. The main viewpoints on the moral status of the embryo are:

1. The embryo has full moral status from fertilisation onwards;
2. There is a cut-off point at 14 days after fertilisation;
3. The embryo has increasing status as it develops; and,
4. The embryo has no moral status at all (Kristina Hug, 2011)

These views are informed by religious views of the status of the early human embryo in different ways. ¹In addition, politics play an important role in the debate of hESC research and cures. For instance, in the US the public debate about stem cells has been heavily influenced by right-to-life groups, whereas in South Korea hESC research has attracted overwhelming support for the public and the government has cross political views. Interestingly, Buddhist groups were one of the loyal supporters of hESC research in 2004 and 2005 in South Korea, even though Buddhist interpretations of using embryos for research is still debatable.

The ethics of using embryonic stem cells for treatment are more complicated. For instance, there is moral dilemma between two moral principles: the duty to prevent or alleviate suffering and the duty to respect the value of human life. Those who have a strong objection to the use of hESC for research and treatment also argue that the use of hESC is unethical because the following reasons (Abboud, year unknown):

1. Embryonic stem cells can cause cancer;
2. It is unnecessary to use them;
3. The benefits of embryonic stem cells are a long way off;
4. The use of adult stem cells seem to overcome the problem of immune rejection, which will be a big problem with the use of embryonic stem cells; and,
5. Embryonic stem cell research is not driven by hope for cures but by a lust for profit.

It is clear that the debates on the use of hESC for research and cures go beyond the moral status of the embryos. How we as a society deal with the side effects

of experimental research and therapies, and how much we are prepared to invest in this field that is promising yet a long way off? And more importantly, which direction that do we really want the stem cell science to go and for what purposes? Without doubt, we will have to face more ethical questions and dilemma as the stem cell science advances and the debate on using embryos for research and cures has to be responding to the development as well as the regulations and policy.

References

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