In Pursuit of the Perfect Child

Advancements in reproductive and genetic technologies have opened up numerous possibilities for the way we have children as well as which children we decide to have. Non-invasive prenatal testing for fetal sex or chromosomal abnormalities can be performed as early as 10 weeks. More invasive procedures like chorionic villus sampling or amniocentesis can test for additional genetic disorders as early as 10 or 16 weeks, respectively. For those using in-vitro fertilization (IVF), genetic testing for some disorders can now be performed on embryos as small as eight cells (3-5 days old).

Many parents use the information obtained in these screenings to help decide whether to continue or terminate the pregnancy—or, in the case of IVF, whether or not to implant the embryo(s). In Iceland, at the extreme end, 100% of pregnancies in which the fetus is determined to have Down's Syndrome are terminated.[1]

Some people criticize such prenatal testing—especially when it is used to determine whether or not to terminate a pregnancy—as an unnatural attempt to influence the genetics of the human race. Moreover, critics argue, like other forms of eugenics, this use of genetic testing is inherently discriminatory against those with conditions such as Down's Syndrome, and sends the message that the lives of such people are less valuable or less worth living. Some defenders of genetic testing note that not all pre-natal diagnoses lead to termination and that knowing ahead of time that one's child will have a genetic disorder can allow parents to prepare appropriately. Other defenders of current practices argue that there is nothing wrong with wanting to have the healthiest child possible—especially given that genetic disorders can sometimes create significant personal and financial costs for families and that many families do not feel like they are in a position to take on these additional costs. Some defenders of pre-natal testing go even further, arguing that it might be wrong to bring a child into the world knowing that she will suffer from some genetic disorder. In response, critics, reiterate that these arguments are themselves based on biased perspectives that devalue the lives of people with genetic disorders.

Many of these moral concerns will be amplified as gene editing technology, such as CRISPR/Cas9, becomes more powerful, allowing us to become better able to determine the genetic makeup of our offspring. Gene editing will enable parents to eliminate genetic diseases in embryos and fetuses, without requiring that they terminate that pregnancy. Although many scientists have cautioned against the use of this technology before its safety and potential ethical issues can be evaluated,[2] a Chinese scientist has claimed to have used CRISPR/Cas-9 to create embryos resistant to HIV infection for a couple who gave birth to twin girls in 2018.[3]

STUDY QUESTIONS

1. Does the moral permissibility of selective implantation or termination depend upon *what* is being selected for or against?
2. What are the morally relevant similarities and/or differences between deciding not to implant an embryo with Down's Syndrome or another genetic abnormality, and terminating a pregnancy in which the fetus has Down's Syndrome or that genetic abnormality?
3. What are the morally relevant similarities and/or differences between selecting which children to bring into the world and intentionally altering the genetic makeup of a single child?

[1] https://www.youtube.com/watch?v=S-X97xxw5aI
[2] https://www.nytimes.com/2015/03/20/science/biologists-call-for-halt-to-gene-editing-technique-in-humans.html?_r=0
[3] https://www.npr.org/sections/health-shots/2018/11/26/670752865/chinese-scientist-says-hes-first-to-genetically-edit-babies