

April 16, 2019

Designer babies

QD1. Recently, a scientist claimed to be the first to change the genetic make-up of embryos belonging to several couples, with the intention of making the children born from those embryos “resistant” to HIV. The scientist says a pair of twins born from these embryos are the world’s first “genetically edited babies” – sometimes referred to in media as “designer babies”.

How familiar are you, if at all, with this concept of “gene editing” to produce “designer babies”? Are you:

- Very familiar with it
- Somewhat familiar
- Have only heard the phrase
- Never heard of it until now

[STANDALONE SCREEN]

Gene editing is a relatively new type of science that could make it possible to change a child’s genes before it is born. Such changes could be made to cure life-threatening genetic diseases, as well as for more superficial reasons, such as to select a preferred hair- or eye-colour.

Today, gene editing is still in its infancy, and attempts at gene editing can cause unintended effects. Further, there isn’t a lot of understanding of whether there are long-term risks associated with gene editing, and what those risks might be.

QD2. Please consider the following scenarios that could be possible in the future. For each one, please indicate whether you think it would be acceptable or unacceptable to use embryonic gene editing for the stated purpose.

[ROWS – KEEP THIS ORDER]

- To cure a life-threatening genetic disease
- To cure a genetic disease that isn’t life-threatening
- To give the child immunity to specific (non-genetic) disease(s)
- To give the child a higher IQ
- To give the child preferred physical characteristics (e.g. eye or hair colour)

[COLUMNS]

- Acceptable
- Unacceptable
- Not sure/Can’t say

QD3. Currently, Canadian law prohibits researchers from altering genes in a way that could allow the modifications to be passed on to future generations (such as in the cases we’ve been discussing so far in this survey). Modifying genes in this way in Canada is currently punishable by fines of up to \$500,000 or up to 10 years in prison.

What are your views on this? Would you say the current law is ...

Too strict – there should be more room for responsible research on this topic in Canada

About right

Too lenient – there should be harsher penalties for doing this kind of work in Canada

QD4. Some people say the risks of gene editing outweigh the potential benefits. They argue that even if the procedure is strictly regulated, people will find a way to use it to create “designer babies”, and that such a probability makes gene editing research too dangerous to pursue.

Other people say the potential benefits of gene editing outweigh the risks. They argue that the procedure can be strictly regulated, and that even if people find a way to use it to create “designer babies”, the potential to save lives makes gene editing research worth pursuing.

Which of these perspectives is closer to your own, even if neither is exactly how you feel?

[RANDOMIZE]

The risks of gene editing outweigh the potential benefits

The potential benefits of gene editing outweigh the risks

[ANCHOR]Really can't say