Ethical implications of three-parent children

In today's world, children often have three parents. A boy's mother and father might divorce, and one remarries. A girl might be raised by a single mother, a cousin, and an aunt. But everybody, without exception, has two biological parents. For the moment, at least.

Through a process known as mitochondrial replacement, scientists are now able to combine genetic information from the eggs of two different women and create a brand new egg. They would then fertilize this engineered egg with sperm from a third parent, creating a child with three biological parents for the first time in human history.

The United Kingdom is on the verge of permitting scientists to move forward with this procedure to create a human child from the DNA of three adults. The United States may not be far behind. Mothers everywhere should be deeply concerned, as this raises numerous ethical questions.

According to researchers, this would be done for therapeutic purposes to help women with certain mitochondrial defects avoid passing on those defects, which can cause damage to the heart, liver, brain, and kidneys, among other parts of the body. Damaged DNA of the mother-to-be would be replaced by the healthy DNA of another woman. But here's the tricky part: the genetic changes would show up in every cell of a child born after such a procedure. Not only that: they would be passed on to all descendants of the girls in whom the change is made. MR is a form of germ-line engineering, or inheritable genetic modification, and it involves manipulating genes to try to determine the traits of future children.

Read the full, original post: The Three-Parent Dilemma

Additional Resources:

- Baby with three genetic parents: Bioethics of mitochondrial replacement, New York Times
- Former IVF baby weighs in on three-parent IVF, Huffington Post
- Now is the time to stop three-parent IVF, Center for Bioethics and Culture