The ethics of parents using scientific technology to choose the gender of their baby before conception.

What are the effects on the embryo and the long term effects on a population if parents are allowed to choose the gender of their baby?

There are no proven long term effects on the child if the parents choose a specific gender. However, there is the fact that there will be an effect on the embryo’s that are not chosen because they are not the wanted sex. The embryo will be killed using the PGD method. The other methods there are no effects because the egg has not yet been fertilized. There is also the effect that in the case of the saviour child, that the child may not feel as loved because it was brought into the world only to help someone else.

At this point in time there are no proven long term effects on a population. This is because designer babies have only been around for about 13 years. Couples in the United states haven’t shown a strong preference towards either boys or girls. So at this stage there is no certainty that a population will grow towards one specific gender. In China there is a stronger preference towards boys. At this stage there is no effect on the population, however there could be a huge affect on a population after 200 years. This is also due to the fact that China already has a one child policy. If the parents found out they were having a girl they would abort it because they are only allowed to have one child. The want to get it right the first time. The sex ratio in China is already 118 boys:100 girls. In 200 years time there would be a lot more boys and hardly any girls left unless the law changes.

There are a few ways that people can go about when choosing the gender of their unborn child. Through history there are ways that it can be done naturally through specific sex positions or having intercourse at different times during ovulation. However these ways are not scientifically proven and the statistics are unreliable. There are scientific ways that parents can choose to undergo to get a more insured result, however this comes will a huge cost and in some states and countries you have to fit the medical criteria.

A less expensive method is the Ericsson method. In this method the sperm is placed in a test tube with viscous fluid. Male producing sperm with a Y-chromosome swim faster than the female producing sperm with an X-chromosome. So the sperm can be separated due to their positions in the test tubes and then the desired gender is placed back in the uterus to grow into a healthy baby. This method is inexpensive but some debate that it still has only a 50% chance of producing the desired gender.

Another technique uses the in-vitro fertilization (IVF) treatment. The scientists mix the eggs and sperm outside the body in a laboratories. In a process known as preimplantation genetic diagnosis (PGD) the cells from the embryos made in the lab to be tested to determine the gender. The embryos that are of the desired gender are then implanted back in the woman’s uterus.

http://staff.esuhisd.org/danielle/english%20department%20village/CAHSEE%20English/Gender

There is an institute called called saviour children in which parents need to choose certain features or gender of their baby to help another of their children that may need cells to save their life. In 2000 Adam Nash was the first designer baby born by the ‘preimplantation process’. Scientists had to genetically choose an embryo that had the right cells to save his big sisters life. His sister suffered from Fanconi’s anemia which is a blood disorder. There was a high chance that Adam’s cells would have the disorder too so they had to choose an embryo that was not affected. When Adam was born the blood cells from his umbilical cord were transplanted into his sister’s body saving her life. Adam was not affected by this in any way as he did not need any medical procedures.
Some people want to choose the gender of their child because of genetically inherited diseases that may be in the family that would affect one gender. In the United Kingdom it is by law that you may choose the gender of your baby for medical reasons only. This is to prevent sex linked diseases and disorders that could be passed on to a particular gender. For example the disorder Duchenne muscular dystrophy is carried by the male. If a someone was known to have had this disorder in their family they could choose to have a girl so that their child could not carry the disease. However this law in the UK is not stopping parents from fulfilling their expectations of their families. Because this treatment is allowed in the United States of America, people from the UK are travelling to the US to undergo the process or get medical advice from doctors in the US that could help them get around the law.

From carrying out this research assignment and evaluating my resources I have decided that designer babies should only be used for medical reasons only. I believe that over many years people will become more rich and become more discriminating towards a certain sex. In my opinion this is not ethically correct. When you look at how there is a stronger preference towards the male gender within China you can see that this has lead to parents aborting or killing their child if they are the undesired sex. In my opinion this is so wrong. However I think that the scientific technology should not be banned altogether.

I agree with the laws in the United Kingdom that this technology should only be allowed to those who need it for medical purposes only. This piece of technology should not be used and abused by anyone who wants it for their own benefits. It should be to save those who need it most. Now people are only getting to choose the gender of their baby. What about in 10 years time when they will be able to choose certain traits and genetic codes that would make their child more pretty or handsome? This would lead to so much disagreements in society where only the rich, beautiful and intelligent would get the good jobs and earn a decent amount of money.

http://designerbabies-rtcc.blogspot.co.nz/2009/06/designer-babies-good-or-bad_10.html (16th September 2013) was very useful as it gave the pro's and con's about the issue. It looks at both sides of the situation, so it gave me a clearer idea of my opinion. The information was very clear and easy to understand. Because the site is a blog it may not be completely factual. It could just been someones opinion that may not be entirely biologically correct. However it did seem to make some sense. Also the information on this blog was created in June 2009, so the information in it might not be up to date, which could lead to misleading information.

Please note – These are extracts from one student’s response