AITCHISON COLLEGE
MODEL UNITED NATIONS CONFERENCE VI

Social, Humanitarian and Cultural Committee

GENERAL ASSEMBLY

Topic: Designer Babies

What are designer babies?

The word 'designer' conjures up images of designer labels and well- known commodities. It has come to be seen as being so desirable that people think of 'designer' items only in a positive sense, whereas a more accurate description would be superficial. So how do babies fit into the equation, exactly? Babies are nature's ultimate gift to mankind; a child to inherit the family name and carry on the family legacy. But nature does not work that way; being the chaotic and random force that it is. Sons sometimes grow up to have different traits, physical and mental, as compared to their fathers. These traits can be viewed as being undesirable, leaving the child to live his life with the stigma of being called a 'failure'. Wouldn't it be nice then, for all parties concerned, if the child grew up to be the man his father wanted him to be? Better yet, to be an even more impressive man than his father? But the dilemma is how to ensure this happens; nature being so random. That is where genetic engineering and the possible creation of designer babies comes in.

Background to the genetic manipulation of pre-born children

1978 was a revolutionary year for genetic engineering. It was made possible for infertile couples to be provided with an already fertilized egg (in the laboratory) to implant in the uterus. This technology further evolved into a technique called pre-implantation genetic diagnosis (PGD). PGD involves screening and profiling the genetic make-up of an embryo. As a procedure, PGD is currently used only in weeding out genes that show a susceptibility to disease or that show the potential to harm the child in later life. Who's to say however, that 10 years from now PGD won't be used to weed out genes that have no relation to medical benefits, perhaps the gene for shortness or dumbness?

Determination of sex

One of the most exciting moments for an expecting couple was the moment when they could finally discern whether their child was a boy or a girl. For the most part, both scenarios were met with equal enthusiasm from the gushing parents. However some cultures did (and still do) favor a male heir. In this case, the father would sag his shoulders and smile a disappointed smile at the news of the birth of a daughter. He couldn't be callous enough to lament the birth of his own child, but enthusiasm would be muted.

Such people then, may have technology to thank for possibly providing an alternative. It is now possible to choose the gender of your unborn child. 'In vitro-fertilization', the technique used, distinguishes between male and female eggs; ensuring only one type of egg is used in fertilization. The technique is commonplace, but its practice is not. In fact, IVF is used only when a hereditary disease runs the risk of being passed to only one kind of gender. It is not used to satisfy the preference of the parents.

But why? Why shouldn't the couple be allowed to choose for themselves what gender of child they want? The human fertilization and embryology authority, based in the UK, give the reason for this as being the likely 'imbalance in the sexes' that would result. It is certainly plausible to imagine that, given some cultures' strong preference for boys, males would soon vastly outnumber their female counterparts. This raises a problem. If there are twice as many boys as girls in the world, where will half the male population find a life partner? We all know what would most likely result.

And another thing. Is there cold-hard evidence that boys live to be happier than girls? Of course not. So why do the parents want to make this choice when their child is no more likely to have a happier life? Clearly, the parents are making this choice independently of what their child may want, that is, selfishly.

Possible solutions: Solutions will depend on what the general consensus of the world's countries is, and thus; the course of action they choose to adopt. The current ban on sex selection, as maintained by the UK, India and China among others, could be maintained and extended to the other nations of the world. However, if it is felt that parents should have a right in this regard; how should the possible imbalance that would ensue be countered? Might the tax system be used to provide incentives to couples willing to have babies of the scarcer sex? Or will the 'imbalance phenomena' be self-correcting as so many things in nature have been? That is for SOCHUM to decide.

Manipulation of intelligence

As of 2014, it is not possible to create and design human beings proven to be of above-intelligence as compared to their un-engineered human counterparts. However, some project that this technology may be available to us in a matter of years. Smarter beings would be created using one of two methods.

a.) If the genetic markers for intelligence could be identified, an egg containing just these markers could be implanted in the uterus. The child born would then presumably be of a superior intelligence level.
b.) The genetic code of the child is operated on directly. A sequence of genes that would tend to produce high intelligence, perhaps that of a Nobel prize winning scientist, could be inserted and spliced into the DNA of the child. The child born would then *have a higher chance* of being smarter.

But *should* we? Is it ethical to allow the creation of children both smarter and healthier than us? To put things in perspective, when educational institutes initiate programs designed to make children smarter and healthier through *education*, we have no problem with it. However, achieving the same thing through genetic manipulation is seen as being unethical. Why is this?

The Risks

Just as there are two ways to potentially create smarter designer babies, there are two mechanisms by which these genes may be introduced. Changing the genome of the somatic cells of a child will result in the genetic changes happening to that child only. However, operating on the germ cells of a child will result in all the genetic changes being inheritable. This is where the issue arises.

Germ line modification is seen as being too great a risk. These changes will be with us *forever*. If anything goes wrong, even slightly wrong given the delicate nature of this work, an entire lineage would be stuck with the abnormal genes that would result.

Another worry is the mysterious effects of adding or deleting specific genes. Harmful side effects, such as a decrease in social skills, may result if children are tried to be made more intelligent.

Lastly, the extraordinary power of genetic engineering dictates that, if any error occurs, the effects are likely to be catastrophic. Some see this as "Humans meddling in a realm they have no understanding of". But this is not a totally fair statement given how many hereditary diseases we have managed to eradicate using this technique.

So are the potentially catastrophic effects of genetic engineering enough to dissuade us from furthering this technique? Or would it be criminally overcautious of us to not practice this art to the benefit of humanity, just because things *could* go wrong? Again, that is for SOCHUM to decide.

Looks

Not only will designer babies be smarter and healthier than us, they may also be more attractive than us. This aspect of designer babies is closely linked with cloning. Imagine for a second, that it becomes possible for mothers to have children physically identical to their favorite movie stars. The wealthy would flock to medical centers for this expensive procedure, and would soon have tiny Scarlett Johansons and Matt Damons walking around with them. Given such a scenario, isn't it inevitable that parents would start to view their children as trophies? Trophies to be displayed and bandied about in order to make other parents jealous? The idea of such a society seems repulsive to us all.

But let's be fair. No-one wants to be ugly. Since we live in a world where people are readily judged based on their looks, we would all want our children to be as attractive and beautiful as possible. If genetic engineering can provide a way of making this possible, and if the parents can afford the procedure, why shouldn't they be allowed to go ahead and have beautiful babies? Yes some people may abuse this technique and start to superficially use their children to feel better about themselves; but who's to say that for every superficial person, there isn't an ugly man wanting to buy his child better looks, so that he or she may not have to go through the mocking and taunting that he faced? To put the question succinctly, are we justified in denying this choice to everyone, because of what a few people might do? Guess who that's for to decide. That's right. SOCHUM.

Elitism and a new class divide

This is the main sticking point of genetic engineering. If we start creating children with better looks, better health, better brains; then we are in effect creating beings superior to us in almost every aspect. This disparity may culminate in a social malaise. Genetically manipulated humans, or 'super-humans', may feel that their interests are best served in a community where there is no mingling with 'commoners'. A community of super-humans spells trouble for the rest of us, because the laws of evolution dictate that their class will then become the dominant force on Earth.

Is such a sorry situation avoidable if we regulate the use of genetic engineering? Many feel not. Indeed they feel it is inevitable. The wealthy will want these benefits no matter what, and genetic engineers; realizing the fortunes they could make, may proceed to set up their clinics and labs in a poor country with loose laws, where genetic manipulation does not face such severe restrictions. Can the UN exert its authority and ban these procedures worldwide? Or are we powerless in the face of a sovereign developing country in need of a boost to its economy, and so willing to overlook the practices of foreign scientists so long as they base their operations inside its borders? This is a question that needs urgent answering.

Incidences and allegations

In 1983 the smartest of the smartest children in the US were gathered for a study entitled the 'study of mathematically precocious youth'. These children were within the top 1% of the population with regards to their mathematical and verbal reasoning skills. The data gathered by this study is now being used by the Beijing Genomics institute (BGI) in an effort to identify and isolate the common gene for intelligence. The BGI was heavily criticized and was accused of eugenics plots. They were also chastised for not prioritizing other social issues, while some scientists viewed the BGI's effort as doomed; claiming that the sample size was too small. The US arts and culture magazine VICE ran an article entitled 'China is engineering genius babies' in March 2013.

Gender selection is legal in the United States, unlike in Canada, China, India and the UK etc. The fertility institute, the world leader in gender selection, offers women the chance to safely choose their child's sex. The institute claims that, in a country like China where there is a one-child policy and so a lot of pressure on the mother to produce a boy, they can help ensure this happens. For fees of tens of thousands of dollars. This practice has been blasted by many notable biologists. Dr. Mark Hughes says he went into medicine "to diagnose and treat and hopefully cure disease. And last time I checked, your gender wasn't a disease". Meanwhile Art Caplan labeled it "Raw sexism".

In 2009, a Los Angeles clinic started offering its patients the option to choose their children's eye, skin and hair color; but were then forced to retract the offer due to a public outcry.

The general consensus

Right now the general consensus of the world seems to be a mistrust of genetic engineering, and a deep unease over its use and application. While the majority may blast it as being unethical, it must be taken into account that human perspectives can change rapidly. Consider a self-claimed 'deeply moral' woman who sees her friend walking about with a perfect child. Envy inspires us to many things; in this case it will inspire the woman to get a designer baby of her own.

NOTE: The committee will be periodically updated with breakthroughs in the technology of designer babies, which can be introduced at any time in the committee sessions.