

The Ethics of Gender Selection

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Introduction

Over the course of human history, the gender of a newborn child has mostly been a surprise and an uncontrollable aspect of the lifecycle. Technology today allows for parents to not only know the gender of their child before birth, but to choose the child's gender before being implanted in the womb. Advancements in reproductive technologies over the past few decades have given parents the freedom and ability to control many aspects of bearing children. In Vitro Fertilization (IVF) and testing embryos for abnormalities are not new in the developed nations of the world, but using these technologies to select gender is a recent and controversial movement for reproductive freedom. Gender pre-selection has been categorized with human cloning, the use of stem cells, and eugenics. In the United States, gender selection through Preimplantation Genetic Diagnosis (PGD) for non-medical purposes is a violation of ethical practices and presents the potential for deep societal complications. The argument does not involve the discussion of religion or any suggestions regarding legislation, but it does address the fact that "[PGD] promotes a public life lacking moral depth."¹

PGD

Preimplantation Genetic Diagnosis is a technology that tests the chromosomes of an embryo to determine genetic abnormalities and gender before being placed in the womb. A sperm sorting process, such as MicroSort, can improve the odds of having a child of the desired gender by 80 to 90 percent.² This technology is not covered under any insurance plan and can cost up to \$40,000, which is the price an Australian couple paid to ensure the conception of a daughter.³ The PGD process is performed when a woman is undergoing In Vitro Fertilization. On the third day of fertilization, blastomere cells are extracted from the embryo and their DNA is multiplied by the thousands. The DNA is then used to identify specific genes, such as gender, and the embryos with the

preferable DNA sequence are put back in the uterus. These will then be grown to full term with the hope, aided by technology, that the child will indeed be the gender the parents desired.⁴

Gender-Linked Disorders

Though the reasons for gender selection are personal, some may wonder why parents are willing to pay thousands of dollars in order to choose the gender of their child. Physicians are presented with two prominent rationales to this answer, but the question is whether or not they are ethical. PGD was originally developed to identify and prevent sex-linked disorders in children and is commonly accepted as an ethical reason to pursue PGD amongst American society. Certain diseases such as Duchenne Muscular Dystrophy, Hemophilia, and color blindness are specifically contracted by males through abnormal genes carried by the X chromosome. A normal Y chromosome is not enough to balance out the abnormal X chromosome and the disease becomes apparent in a male child. It is different for females since they are made up of two X chromosomes; if one is defective and the other is normal, she will become a carrier but not express the disease. For families vulnerable to these gender linked genetic diseases, PGD allows them to avoid conceiving a child with the potential for a serious illness and significantly reduces the risk of a premature death.⁵

Prior to the embryo being artificially inseminated into the womb, the chromosomes can be screened for these genetic diseases. "There are thousands of babies born now that we know are going to be free of lethal and/or devastating genetic diseases. That's a good thing," Dr. William Gibbons from a fertility clinic in Baton Rouge comments.⁶ There are a few companies that have the technologies for sperm sorting, and each has their own set of requirements that need to be fulfilled in order to be eligible for the procedure. Medical reasons for choosing a gender-specific child is the main issue physicians take into consideration before proceeding with the PGD process. However, there are also companies that do not take into consideration any of the ethical issues of this technology and are willing to offer their services to whoever can afford the procedure. In regards to medical practices, PGD technology advances previous methods in which a fetus was tested for gender-based genetic diseases and then aborted if it turned

out to be affected.⁷ Instead of conceiving and later aborting a child, PGD allows parents with genetic medical conditions to conceive a child free of illness. Under these circumstances, the use of PGD produces the best outcome for both mother and child. It prevents mothers with a genetic disposition to gender-based diseases from aborting one or more children and prevents children with the potential for those diseases from suffering and falling ill from serious gender based diseases.⁸ Therefore, in the case of medical need, the use of PGD is an ethical practice. Using PGD for medical reasons is guided by the Utilitarian approach to ethical behavior, which argues that ethical actions produce “the greatest good for the greatest number.”⁹

The Utilitarian approach is rooted in the idea that ethical actions are judged based on the consequences of those actions, not the intentions. The approach relies not on self-interest, but the overall interest of humanity.¹⁰ In the case of PGD, the use of this technology for medical reasons creates the best consequences for all of humanity, which is that fewer children are born with serious illnesses. However, it could be argued that the utilitarian approach can be used to justify the use of PGD for non-medical reasons, as it would make more parents happy and fulfilled. This argument can be traced back to self-interest at the expense of humanity’s long-term interests, especially concerning the consequences of PGD on natural selection. The consequences for the medical use of PGD provides a better outcome for more people, while non-medical uses of the technology actually produces worse consequences for humanity than if it was not used.

“Family Balancing”

Another defense for the ethics of gender selection involves “family balancing,” which is a non-medical justification for PGD. Families that already have one or more children of one sex may want to select the gender of their next child to “balance” the gender ratio of their offspring.¹¹ The “family balancing” argument for gender selection is based upon the reasoning that children who are raised in a family with both genders will be better for society as a whole. However, this argument could also be viewed as a parent’s wish for a child of a specific gender. For instance, instead of a family with multiple children wanting the opposite gender for balance, it could be that a family values a firstborn of a certain gender. Some Asian cultures hold belief systems where firstborn

males are preferred over females.¹² Presently, there is no strong evidence supporting that “family balancing” provides a significant benefit for individual children or society as a whole. Gender selection for family balancing remains an unethical use of control over a non-critical issue concerning childbirth. The problems associated with the widespread use of gender selection become apparent when considering the number of harmful impacts this human intervention has on society. Bio-ethicist John Robertson of the American Society for Reproductive Medicine commented on the societal defense for family balancing saying that, “a strong showing in the future that gender variety among children is important to an individual's welfare or a family's flourishing could justify a different result.”¹³ Until evidence is presented that gender variety in families produces better results for society, PGD should not be employed as a vehicle of parental satisfaction. Using the rights-based approach to ethics, every human has dignity based on their human nature and “they have the right to be treated as ends and not merely as means to other ends.”¹⁴ Each child has a dignity that must be preserved. Using children as a means to another end such as the fulfillment of the wants of their parents is a violation of the basic dignity of the child.

Though determining a child's gender may equalize gender within a family, it can potentially offset the world's natural gender ratio. A fairly equal division of births amongst boys and girls has existed both in the past and present. If one gender were to become consistently preferred over another, the issues of gender-power and sexist values become relevant. Whether the greater value is placed on males or females depends on the cultural beliefs of different countries. Unequal gender ratios based on social reasons is a current problem in China and India because their cultures value male offspring.⁷ Preferring one gender over another conveys the message that sexist practices are acceptable in the United States.¹⁵ What the American population has to consider is this: “is there any merit to the argument that sex pre-selection reinforces a social tendency to link sex to worth, ultimately harming the cause of male-female social equality?”¹⁶ Prejudice values are something America has been devoted to eliminating over the past few decades. Allowing gender selection for non-medical purposes does not work to solve any societal issues, but rather creates morally unacceptable values.

Children as Consumer Products

Further supporting the irrationality of gender selection for non-medical reasons involves the idea of children as consumer products. PGD is often referred to as the first step in the creation of a “designer baby.” Paying for a child’s gender provides another way Americans can use money and technology to fulfill superficial desires. The argument does not suggest that the display of financial status through the purchase of expensive products alone is an unethical practice. It does however suggest that when children are marketed as such products in society, it is dehumanizing to their character and compromises their dignity. What will become of the world if people view and treat their children the same way they treat their cars, jewelry, houses, etc? Karen Peterson-Iyer states “that to manipulate offspring genetically is to treat them not as dignified human subjects worthy of respect, but rather as objects of parental whim.”¹ This has a significant impact on a human being’s self perception. Furthermore, it affects the families that do not follow the “trend”. If these families cannot afford the technology or are unwilling to use it, they are placed outside the societal norm. This will create an unnecessary division amongst American society and instill a presence of unethical values in the daily lives of the American people. By allowing sex choice for non-medical reasons, American society will forever lose its natural essence and perhaps halt natural selection, therefore hindering the evolution of the human species.¹⁵

When is Too Much?

Soon technology may allow parents to specify not only gender but height, eye color, skin tone and so on. The trend towards gender selection aligns with the idea that people increasingly want control over every possible aspect of their lives.¹⁷ Surprisingly thus far, gender selection garners less attention than human cloning, even with the eugenic potential of this technology. If the United States continues to accept gender selection, it may be the gateway to other forms of trait selection. Many proponents of gender selection argue that banning the technology would be restricting reproductive freedom. This argument looks only at the individual choice and less at the social and cultural effects of these types of decisions. If the technology were to become widely used, it is likely to precipitate societal pressures on the parents about the choices they make for

their child. “Becoming enfolded into a technological destiny requires a fundamental alteration of moral vision,” and it is dangerous to assume that preference of the individual grants moral permission. While these issues are speculative at best, the effect of this technology on society presents a realistic threat.¹

Gender selection methods of the poorer populations, such as infanticide, are illegal and blatantly unethical, while more expensive methods such as sperm sorting may be viewed as both ethically and legally acceptable. In China and India, gender selection resulted in a heavily unbalanced population and society did not self-correct the value placed on the female population due to scarcity. This method works in economics with the supply and demand of a product; however, the idea does not translate to the value of a certain gender. This technology creates the opportunity for gender stereotyping and discrimination by a society, which can be seen by the remarkable gender disparity in China where there are more than 500,000 “missing girls” each year.⁷ If used on a large scale, the gender ratio may become severely imbalanced forcing the requirement to select a certain gender so that a balance can be reached. The outcome would result in the restriction of reproductive rights, rather than the liberty of them, which is what the proponents of this technology argue today.¹⁸

Competition in Demand

The PGD method has been around for over a decade, but its use as a gender selection technology is fairly new. Moving from the use of PGD as a medical risk-reduction tool to a preference trend is a simple task, but many doctors have refused to use the technology for such unethical purposes. A reproductive endocrinologist at NYU Medical Center adds that “centers offering such sex selection would sully the field and could ultimately make it impossible to help patients with a medical need for the technology.”¹⁹ Gender selection for many couples with genetic diseases raises serious concerns about the health of the mother and child. If a trend develops around the selection of a gender, it could hinder a doctor’s ability to help those with a true need for this technology.

Non-medicinal uses of the technology might create competition in demand, rewarding the highest bidder instead of the people using the procedure for medical

purposes. By eliminating those couples using PGD for medical purposes, society will face a larger economic burden that come with some of these gender specific diseases. In the United States, reproductive rights have remained very private, creating a barrier for discussion surrounding ethical issues of gender selection. When comparing gender selection to plastic surgery, which to many is considered a luxury of the wealthy, the issue becomes clearer. Using PGD for non-medical reasons can diminish the American value of self-worth as it becomes exclusive to those in higher classes, widening the economic gap and stratifying society.

Natural Selection

A popular criticism of gender selection is that the doctors, and to an extent the parents, are “playing god” by choosing the gender of their child. Using the term “playing god” has many implications and involves a debate that is outside the scope of this paper. However, having a child is a natural phenomenon and should remain that way for several important reasons.

The reproductive process is well understood by today’s standards, but there is still much to learn. Scientists do not fully understand why a particular sperm makes it to an egg before the others; it could be random or it could be nature’s primary form of natural selection. If it is the former, then there is little to worry about, but the latter would imply that we (the human race) are in fact weakening ourselves by controlling the reproductive process and hindering evolutionary progress. As conditions such as climate and disease change over time, natural selection ensures that the best adapted varieties of the species will survive to reproduce. Thus, those who have evolved to better adapt will become a larger portion of the population and continue the species.²⁰ PGD and other sperm sorting technologies could allow an inferior sperm to be implanted and produce an embryo. Though parents may get the option to choose either a boy or girl, the choice may lead to the development of other undesirable traits; low intelligence, birth defects, the passing of hereditary diseases, or even genetic disorders. These undesirable traits could be further filtered out by genetic engineering technologies, allowing parents to further customize their children. This notion of “procreative liberty fails to address [the] question of destiny, a serious omission since it purports to guide an irresistible ‘desire for greater

control of the reproductive process.”¹ This begs the question; does gender selection really represent a scientific leap that will benefit mankind?

Gender-Identity Crisis

There is another problem that could stem from the use of gender selection technologies, particularly with the use of genetic engineering. Gender Identity Disorder “is defined by strong, persistent feelings of identification with the opposite gender and discomfort with one's own assigned sex.”²¹ It is considered a mental illness in the *Diagnostic and Statistical Manual of Mental Disorders*, but recent scientific research indicates the problem may be biologically or genetically related.²² If the gender of an embryo is changed through the use of genetic engineering, the operation would essentially become a pre-birth sex change operation. This could potentially lead to an increased number of people with gender-identity issues due to human interference with a natural process. A common complaint of people who face gender identity issues is that they do not feel whole or complete. It is logical to assume that this feeling could become apparent to a child whose gender was chosen for them. This is not suggesting that transgendered people are undesirable, but that a child whose gender was selected may mentally and emotionally embody a different sex later in life because of a choice made by the parents before birth.

The individual psychological effects of gender selection go beyond transgendered people and can also affect the relationship of the parent and child. If a child is not born the chosen sex, this could create tension within the family due to preconceived ideas about the identity of the newborn. It is important to recognize that while gender selection does offer the image of a perfect family, it is still an unproven technology that has the potential to create deeply rooted physical and/or psychological problems that the child would have to live with for the rest of its life.

Procreative Rights

Procreative autonomy “is the liberty to decide when and how to have children according to what parents’ judge is best.”²³ Many parents feel that if the technology exists, then they should have the procreative right to choose the gender of their child to

create the type of family they want to have. What this particular argument fails to address is that procreative autonomy concerns an individual's control of their role in procreation and allows them to exercise their individual liberty. It should not explicitly grant them the liberty to intervene with the natural formation of a child because that would interfere with the child's individual liberty and autonomy. By choosing the gender of the child for them, they are stripped of their own autonomy to grow as needed. It violates the roles and morals that American society values and has deemed ethical practice. With regards to gender selection, procreative autonomy is the equivalent to assuming that parents and doctors know what is best for an unborn child. It also assumes that the decision of doctors and parents produces a better outcome than natural selection would.

Conclusion

While the technology does exist to choose a child's gender, it does not imply that it should be used for non-medical purposes. Childbirth is a complex series of molecular reactions and organic growth, and while doctors have learned much about the process, there is still much that is unknown. The companies that offer these services cannot guarantee the gender of the baby and ultimately cannot determine the mental and physical state of the child. For this reason, gender selection is not a safe or proven process.

Before PGD, pre-birth gender selection methods were more myth than science, but now that parents literally have the ability to pick male or female, it is more important than ever to consider the consequences. Technological pre-birth gender selection not only interrupts a natural process, but it can also disrupt the delicate formation of the child-parent relationship. The potential consequences of this technology are numerous and life-long for the families involved. A significant pressure is placed on children born into situations where they are built to fit a specific dream of their parents. When the image of that perfect child and family does not transfer into reality, how much will the next procedure cost to fix what is not right?

Technology has allowed mankind to make many choices about how people live their lives, but gender selection allows people to make a choice about someone else's life, a choice that is ethically not theirs to make. The use of this technology cannot be looked

at as the preference or choice of a parent when that choice can severely impact the child's quality of life and damage the workings of society as a whole. The study of medicine has produced many wonderful achievements that have benefited mankind and additional regulation in the medical community would only hinder its progress. For this reason, it is the duty of the parents to ignore this technological capability and not intervene in the natural process of childbirth.

Works Cited

- [1] B. Waters, Reproductive Technology. Cleveland: The Pilgrim P, 2001. 1-148.
- [2] "MicroSort Technology." [Online Document] MicroSort. 1996. Genetics and IVF Institute. Feb.-Mar. 2007, Available at: <http://www.microsort.net/results.php>
- [3] "Designer Daughter." [Online Document] ABC News Online. 2006. Feb.-Mar. 2007, Available at: <http://news.au.com>

- [4] Verlinsky, Yury, and A. Kuliev. Preimplantation Diagnosis of Genetic Diseases. New York: Wiley-Liss, 1993. 1-155.
- [5] A. Silverman, "Genetic Diseases." [Online Document] The Silverman Center for Gender Selection. 2005. The Silverman Center for Gender Selection. Feb.-Mar. 2007, Available at: <http://www.gender-select.com>
- [6] Talk About It. [Online Document] 2007. OC Online Community. Feb.-Mar. 2007, Available at: <http://talk.ocregister.com>
- [7] C. Sureau, "Human Reproduction." [Online Journal] Gender Selection: a Crime Against Humanity or the Exercise of a Fundamental Right? Apr. 1999. Oxford Journals. Feb.-Mar. 2007, Available at: <http://humrep.oxfordjournals.org>
- [8] B Dickens, "Can Sex Selection Be Ethically Tolerated?" [Online Journal] JME Online. 2002. Journal of Medical Ethics. Feb.-Mar. 2007, Available at <http://jme.bmj.com/cgi/>
- [9] C. Kay, "Notes on Utilitarianism." [Online Document] 20 Jan. 1997. Apr. 2007, Available at: <http://webs.wofford.edu/kaycd/ethics/util.htm>
- [10] L. Hinman, Ethics Updates - Presentation: Utilitarianism [Online Document] Available at: <http://ethics.sandiego.edu/presentations/Theory/Utilitarianism>
- [11] A. Cline, "Gender Selection- Ethical Considerations & New Technologies." [Online Document] Agnosticism/Atheism.2007.Feb.Mar.2007, Available at: <http://atheism.about.com/>
- [12] J. Robertson, Preconception Gender Selection. [Online Journal] American Journal of Bioethics, Available at: <http://muse.jhu.edu/journals/>
- [13] "Thinking About Sex Selection." [Online Document] Staff Background Paper. Oct. 2002. The President's Council on Bioethics. Feb.-Mar. 2007, Available at: <http://www.bioethics.gov/>
- [14] Santa Clara University. A Framework for Thinking Ethically. [Online Document], Available at: <http://www.scu.edu/ethics>
- [15] C. Sureau, "Human Reproduction." [Online Journal] Gender Selection: a Crime Against Humanity or the Exercise of a Fundamental Right? Apr. 1999. Oxford Journals. Feb.-Mar. 2007, Available at: <http://humrep.oxfordjournals.org>
- [16] K. Peterson-Iyer, Designer Children. Cleveland: The Pilgrim P, 2004. 1-232.
- [17] B. Engelen and A. Vandeveld. "A Defense of Common Sense." [Online Document] Institute for Philosophy (2004). Feb.-Mar. 2007, Available at: <http://www.ethical-perspectives.be>
- [18] K. Cloonman, C. Crumley, and S. Kiymaz. "Sex Selection: Ethical Issues." [Online Document] Developmental Biology. The New York Times. Feb.-Mar. 2007, Available at: <http://8e.devbio.com/>

- [19] G. Kolata, "Fertility Ethics Authority Approves Sex Selection." [Online Document] Human Genetics in the Public Interest. 28 Sept. 2001. Center for Genetics and Society. Feb.-Mar. 2007, Available at: <http://www.genetics-and-society.org>
- [20] The University of California Museum of Paleontology, Berkeley. [Online Document] Available at: <http://evolution.berkeley.edu/>
- [21] L. Stevens, "Gender Identity Disorder." [Online Document] Psychology Today. 24 Oct. 2005. Psychology Today. Feb.-Mar. 2007, Available at: <http://psychologytoday.com/>
- [22] "Gender Identity Disorder." [Online Document] Answers.Com. Feb.-Mar. 2007, Available at: <http://www.answers.com/topic/gender-identity-disorder>.
- [23] J. Harris, "Goodbye Dolly?" The ethics of human cloning. J Med Ethics 1997; 23: 353-360.