

Taking the Guess Out of the Gender Game: Ethical Issues in Pre-Conception Sex Selection

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## **Introduction**

“It’s a boy” or “It’s a girl”! These two simple sentences are by far the most exciting news a mother and father hear in their careers as parents. It’s a flip of a coin, 50 – 50, boy or girl. What if, that ratio could be predicted or even ensured to go in your favor? With technology advancing as fast paced as it is in the world, this chance game of gender may be completely negated. As this is an advance in medical-based technology, nurses may be involved in the genetic aspects and help facilitate the decision-making process of a family choosing whether or not to use this technology. Therefore, nurses need to become more educated in this area of research and begin to understand the variety of ramification of this advance.

As one would assume, this process of gender selection can create a complex ethical dilemma. Where does this idea of selection end? With the development of preconception sex selection, one must wonder if those interested may want to make their choices more detailed. First gender, then intelligence, sense of humor or maybe even beauty. Or looking at this topic in a different light, could it be used to prevent gender-biased diseases? According to the World Health Organization (2011), this technology could be seen as a preconception form of sexism and could result in the ultimate imbalance of gender in the world. Inevitably, a line must be drawn. The purpose of this paper is to explore these pros and cons of the ethical dilemma created by this new technology as well as its importance in the nursing profession. To begin to discuss the implications, one must understand the process itself and the consequences it creates.

## **Literature Review**

Appropriately named “Preconception Sex Selection” or PPS, this scientific breakthrough is new in regards to technology; however the idea of choosing gender has been in existence for quite some time. According to the article, “*Sex-Selection of Human Spermatozoa: Evolution of*

*Current Techniques and Applications*” (1998), the goal of sex selection has been attempted since as early as the Egyptians. In fact, in 500-428 B.C., the Anaxagoras believed that “semen from the right produced the males, while female progeny derived from “seed” of left testicle” (Sills, Kirman, Thatcher & Palermo, p.109-110). Although the technology of choosing the sex of a baby has changed dramatically since these times, the idea that the male dictates the gender has not changed at all.

The concept of the male choosing the sex stems from the fact that it is the sperm that plays the role of gender-decider in the technique used for more current times. The most simplistic technique is seemingly logical. Ramaley (2000) explains the process quite well in the following:

It works by using a laser beam to detect dyed chromosomes within the sperm. Since X chromosomes have 2.8% more DNA than Y chromosomes, they glow brighter underneath laser light. Following chromosomal detection, the sperm are sorted using an automated sorting machine. (p. 249)

After the sperm are sorted, the gender of choice is collected (X or Y) and implanted within the mother’s ovum. This process completed removes the chance aspect as if one were flipping a one-sided coin.

As simple as the process of gender selection seems, the debate around it is actually quite complicated. Many different dilemmas stem from this advance in technology. These can range from the debate regarding the right to choose a child’s gender all the way to the consequential inequality of gender ratios and gender sexism resulting from this choice. Each of these topics under the umbrella of gender selection is loaded with literature evidence supporting and opposing the overall issue.

According to Strange and Chadwick (2010), the idea of autonomy is the center stage of the pro-side of the debate in stating that gender selection is “appealing to the significance of parental autonomy” (p. 225). Continuing on this road of the parent’s right to choose, J. Savulescu (1999) argues that the pre-selected male or female child may actually receive less psychological harm than a child whom is a gender that the parents did not choose. This psychological cushion stems from the fact that the “parents will treat a child of that sex [that they choose] more favorably” (p. 373-375). As autonomy is one of the eight ethical principles, the ability for parents to have this right to decide is a valid argument; however the issue lies in where this autonomy will end.

An additional subject area of the argument revolves around the idea of family balancing. This term can be seen as both a positive and negative aspect of this debate. Those who would be proponents of this side of the debate may include those in countries that highly value sons over daughters. With this ability, a family whose cultural beliefs favor males and whom have all female children, can begin to balance this issue with gender selection technology. For instance, in a discussion regarding a study of male to female birth ratios in the United States, it was stated that “Korea, India, China and some other countries rates have increased in excess to 1.08 (U.S. average is 1.05) have been found and these have been interpreted as having arisen through prenatal gender selection” (Egan et al., 2011 p. 563). Even countries that do not normally have known gender preferences the idea of a balanced family is valued. In a survey conducted in the United Kingdom, “68% of people would like to have as many girls as boys” (Dahl, Hinsch, Beutel & Brosig, 2003, p. 2238). While the idea of gender selecting will allow individuals to balance out their families, in an article entitled *Sexism, Family Selection and ‘Family Balancing’* (2008), the author argues that the idea of family balancing makes families that are not balanced

inferior to those that are balanced equally (Wilkinson, p. 372). The issue of family balancing thus can be seen as culturally-bound and society-driven. The use of gender selection can deviate from the variety that stems from “unbalanced” families, but does coincide with the values of gender influenced cultures.

With a balancing of families, this can lead to an eventual gender imbalance within the world. Especially in cultures where sons are of great importance, the ability to gender select may lead to a greater number of males in that society than females. This selection of males over females can be seen as a method of sexism. In turn this is reinforcing the idea of oppressing women. According to Zilberberg (2007), “certain measures ought to be taken which would promote the belief that females are worthy of being born and living as males, and are intrinsically valuable” (p. 519). However, an opposing argument would bring up the fact that this issue may not be as present in cultures that do not favor show gender preference. For instance, in the United Kingdom survey discussed previously, 71% of people decided they would not take advantage of the gender selection technology (Dahl et al., 2003, p. 2238). This points to an absence in gender preference as individuals are not indicating an interest. Thus, yet again, culture deeply connected in the debate concerning gender-selection.

### **Conclusion**

All of these issues revolve around the center concern that is preconception gender selection. Whether it is sexism, autonomy or family balancing, cases can be made for and against this ethical issue. The technology gives parents the power to decide what gender child they will have, but this also opens the door to the potential of choosing everything up to whether or not the child has a beauty mark. It also allows for gender balanced families, while creating the

potential for gender imbalance in countries that may choose to implement this technology more than others.

One must also look at the bigger picture. Gender selection can be a slippery slope. With the ability to choose the sex of a child, will one choose to select for intelligence, beauty or athletic ability? As shown, there are a plethora of studies looking into the issue regarding the consequences of gender selection, but research is lacking in the realm of how far technology and individuals are willing to go. Additional research assessing opinions of those of child-bearing age to determine what types of attributes people are willing or not willing to select would be a great topic of future study for this ethical dilemma.

No matter what the argument or selection criteria, nurses who choose to go into a field in which genetics or child bearing is the forefront of care, need to be aware of the complexity that comes with the gender selection process. As with any ethical dilemma, it is important for nurses to understand their own opinions and beliefs in order to better understand others. A healthy understanding of the process, pros and cons and cultural awareness, will help the nurse provide more effective and knowledgeable care.

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