

“Use of reproductive technology for sex selection for nonmedical reasons” (2015), by the Ethics Committee of the American Society for Reproductive Medicine

In June 2015, the Ethics Committee of the American Society for Reproductive Medicine, or ASRM, published “Use of reproductive technology for sex selection for nonmedical reasons” in *Fertility and Sterility*. In the report, the Committee presents arguments for and against the use of reproductive technology for sex selection for any reason besides avoiding sex-linked disorders, or genetic disorders that only affect a particular sex. When couples have no family history of a sex-linked disease, the use of reproductive technology for sex selection raises ethical questions about the application of sex selection technology to fulfill parental desires. “Use of reproductive technology for sex selection for nonmedical purposes” examines the ethical debate surrounding sex selection for nonmedical purposes and is an educational and ethical reference for physicians who are considering offering those services in their practices.

The ASRM is a non-profit organization consisting of a multidisciplinary team of healthcare providers who educate, advocate, and conduct research within the field of reproductive medicine. The ASRM was founded by a group of physicians in 1944 in Chicago, Illinois. As of 2018, the ASRM is headquartered in Birmingham, Alabama, and has members in all fifty states of the US and in more than one hundred other countries. Its members include research scientists, nurses, laboratory technicians, and physicians who specialize in fertility. ASRM’s Ethics Committee regularly addresses ethical concerns regarding reproductive medicine in *Fertility and Sterility*, a peer-reviewed medical journal published and managed by the ASRM since 1950. The individuals on the committee are not identified. The ideas, decisions, and recommendations are presented by the committee as a formal report published in *Fertility and Sterility*.

Prior to the publication of “Use of reproductive technology for sex selection for nonmedical reasons” in 2015, the ASRM Ethics Committee published a series of reports on the ethical considerations of sex selection for nonmedical purposes in which they changed their stance over time. In reports published in 1994 and 1999, the committee did not support sex selection for nonmedical purposes. They determined that sex selection was only justified for medical reasons such as preventing infants from inheriting sex-linked diseases, or genetic diseases that can be inherited by an infant of a particular sex. The ethical concerns raised by sex selection include the potential for gender discrimination, health risks and medical burdens on couples who were attempting pregnancy, controlling characteristics of children unrelated to medical conditions, and equitable availability of medical resources. However, in 2001, the committee published another report in which they considered increasing gender variety in a family a justifiable nonmedical reason for sex selection. In that report, they recognized that couples may have a strong preference for a particular sex, especially if the couple already has a child or many children of a single sex, that may result in the couple seeking sex selective abortion or avoiding copulation completely. The committee determined that couples may use reproductive technology for sex selection only to have a child of the opposite sex of their existing child or children.

In their 2015 report, “Use of reproductive technology for sex selection for nonmedical reasons,” the committee provides their most recent stance on the ethical considerations of using reproductive technology for sex selection for nonmedical purposes. The committee prefaces the report with a statement indicating that the decisions in the 2015 report replace the committee’s previous decisions on sex selection for nonmedical purposes. In the report, the committee first provides back-

ground information about the reproductive technologies that allow for sex selection and discusses the ethical dilemma that healthcare providers face when deciding whether or not to offer those technologies for sex selection for nonmedical reasons. Then, in separate sections, the committee presents the arguments supporting and opposing the use of reproductive technology for sex selection for nonmedical reasons. Those sections are followed by a section that details the social justice concerns related to sex selection for nonmedical reasons. The report concludes with an explanation of the committee's final decision in which they do not come to a consensus on the ethicality of the use of reproductive technology for sex selection for nonmedical purposes, as well as recommendations for healthcare providers who wish to provide the service to patients.

In the background section of the report, the committee provides an explanation of the two reproductive technologies that physicians most commonly use for sex selection. The first method they mention in the section is preconception sperm separation, the process of separating sperm cells by their sex chromosome. After collecting a sample of sperm cells with the same sex chromosome, physicians artificially inseminate the woman with that sample to impregnate the woman with the fetus of the desired sex. Male sperm cells carry either an X chromosome or Y chromosome, which produce a female or male child, respectively, when the sperm fertilizes the egg. Sperm separation technology allows physicians to collect samples of sperm with the sex chromosome that physicians then use for artificial insemination, the process in which sperm is injected directly into a female's uterus for fertilization. The second method mentioned in the report is preimplantation genetic screening, or PGS. To perform PGS, a physician screens an embryo grown outside of the body via in vitro fertilization, or IVF, for its genetic traits, including its sex. Couples can then choose the embryo to be implanted into the woman during the IVF cycle based on its sex. Those technologies are considered assisted reproductive technologies, or ART.

At the end of the background section, the committee explains why healthcare providers seek ethical guidance when choosing whether or not to provide services for sex selection for nonmedical purposes. The authors cite a survey that reveals that some ART clinics in the United States do offer reproductive technology for sex selection for nonmedical purposes. The survey was distributed to 415 ART clinics in the US by the Berman Institute of Bioethics of Johns Hopkins University in Washington, DC. The survey indicated that forty-two percent of clinics that provide PGS services offer it for sex selection for nonmedical reasons. Half of those clinics report providing that service under all circumstances, while forty-one percent only offer it to couples who already have at least one child. The committee states that despite the prevalence of sex selection for nonmedical reasons, healthcare providers and the public continuously express ethical concern for applying reproductive technology in situations where there is no medical benefit to the child. After citing that study, the committee explains that they present arguments both for and against the use of ART for sex selection for nonmedical purposes to assist clinics in their decision of whether or not to provide that service.

In the next section of the report, the committee details the ethical considerations for supporting the use of ART for sex selection for nonmedical purposes, which include protecting and maintaining patients' reproductive rights. The committee acknowledges that a couple's desire to balance the sex ratio in their families and have the experience of raising children of both sexes are strong influences for pursuing sex selection. The committee identifies those desires as materialistic aspects of reproductive decision making. However, the committee acknowledges that whatever the reason couples have for wanting to choose the sex of their child, utilizing reproductive technology for sex selection is a private matter between patients and physicians. Therefore, access to ART that gives parents control over their child-rearing experiences could be considered a reproductive liberty that is lawfully protected under the US Constitution and not regulated by the government. The committee explains that attempting to regulate sex selection for nonmedical reasons could potentially violate patients' privacy and autonomy, or the right of a patient to make their own decisions, when it comes to the evaluation and judgment of personal desires and individual circumstances.

The next argument supporting the use of ART for sex selection for nonmedical reasons that the committee presents is the absence of gender bias in couple's sex selection decisions. The committee acknowledges that parents' motivation to choose the sex of their child are not always discriminatory or reflective of a gender bias. For example, the committee explains that it is reasonable for couples

to believe that there is a difference between raising a child of a different sex, and the importance of that experience to the couple is a justifiable nonmedical reason for seeking out sex selection options. The committee also cites three studies that surveyed couples about the reasons they wanted to choose the sex of their child, and the couples' responses did not reflect a gender bias.

In the section that details the arguments against the use of ART for sex selection for nonmedical reasons, the committee first presents the concern of medical risks. They state that although the long-term medical risks of sex selection techniques to offspring are unknown and no serious risks have been identified, it is ethically unacceptable to take any risks for nonmedical reasons. In contrast, the committee provides an explanation for justifying sex selection for medical reasons by stating that when couples use ART for sex selection to avoid sex-linked disease, the potential risk is outweighed by the benefit. There is also a risk to the woman if she chooses to use PGS in combination with IVF to become pregnant. The committee acknowledges that IVF technology is not perfect, and diagnostic error can occur with PGS. Much like the potential risk posed to the offspring, potential risk posed to the woman is not ethically justified for nonmedical reasons. However, if a woman wants to go through with the sex selection process for nonmedical reasons, the committee recommends that the woman speak to a counselor to ensure she is not being pressured into the decision by outside influences, including her partner's strong preference or societal views.

Continuing with arguments against the use of ART for sex selection for nonmedical purposes, the committee also provides data that demonstrate a disapproving attitude towards PGS on a global scale. A survey that found sixty-eight percent of Americans oppose PGS for sex selection for nonmedical purposes. To compare attitudes about the issue on a global scale, the committee explains that in Germany, using PGS for nonmedical reasons is even less favored than in the US. They also explain that in the United Kingdom, opposition to sex selection often takes precedence over patient privacy and autonomy. The committee goes on to say that critics of PGS have expressed that in the rare cases that PGS should ever be acceptable, sex selection should never be considered a justifiable reason to use the technology. Those critics also argue that using medical resources for nonmedical purposes could lead to parents having the ability to choose other traits of an offspring in a manner that would be even more ethically problematic.

The last argument the committee presents in opposition of ART for sex selection for nonmedical purposes is the potential imposition of inappropriate gender norms on the resulting child by their parents. The committee defines gender norms as the idea that there are some characteristics that are inherently female and others that are inherently male. They state that if gender norms are imposed on a child, it may cause psychological harm to the child and disrupt the parent-child relationship. The committee also explains that sex selection for nonmedical reasons may deny the child the right to express their gender freely, especially if their parents perpetuate gender norms.

The final section of the report focuses on social justice concerns that arise when couples use ART for sex selection for nonmedical purposes. Before explaining the social justice concerns, the committee begins the section by comparing the regulation of sex selection for nonmedical purposes in the United States to other countries. In the US, state law mandates the legality of ART for sex selection for nonmedical reasons and there are no states that prohibit the practice as of 2018. However, the practice is prohibited by law in Canada and in European countries. Sex selection for nonmedical purposes is also regulated in Israel and New Zealand, with only a few documented cases in each country.

The committee then addresses the first social justice issue, which is the potential for sex selection to cause imbalances in a population's sex ratio. The committee explains that concern about gender discrimination is greater in some places than others, often due to a deeply rooted cultural and societal preference for males. For example, in countries such as China and India, female infanticide and abortion have caused imbalances in the sex ratio. The sex ratio at birth is the number of males born for every one hundred females, and the normal range is 102 to 106 males born per 100 females. However, the sex ratio at birth in China and India in 2005 was 120 and 113.6 males born per 100 females, respectively. According to the World Health Organization Department of Reproductive Health and Research in Geneva, Switzerland, without the proper regulation of the use of ART for sex selection in these areas, the perpetuation of gender discrimination will be reflected in the imbalanced sex ratio. The committee acknowledges that gender discrimination does not affect

societies within the US as much as it does in other countries. For example, the committee provides data from a 2004 US survey that showed there is no dominant preference for one sex or the other and eight percent of people would consider using sex selection for family balancing. However, the committee warns healthcare providers that couples from other countries may seek ART options for sex selection in the US to bypass their countries' regulations. In those cases, the committee recommends thorough patient counsel including informed consent and ensuring that the patient's decision is not influenced by outside pressures.

The second social justice issue the committee addresses is equality of healthcare resource availability. The committee presents the argument that using ART for nonmedical reasons may impose limitations on the availability of reproductive resources for medical use in places where those resources are already scarce and where a greater cultural pressure for sex selection exists. The committee suggests that if clinics decide to offer sex selection for nonmedical purposes, they must ensure they are providing equal amount of ART services and other reproductive resources for medical reasons as well. They also add that the service must be provided to all patients equally despite race, ethnicity, religion, sexual orientation, or marital status. The committee briefly mentions the social justice concern of socioeconomic status as well, stating that the use of ART for sex selection for nonmedical purposes may only be practical for those who are able to afford it. However, they do not provide suggestions or recommendations about how to resolve that potential discriminatory factor.

To conclude the report, the committee reiterates that they have not come to a consensus on whether using ART for sex selection for nonmedical reasons is entirely ethical. However, they do offer suggestions on how healthcare providers could most ethically provide the service if they wish to do so. They encourage clinics to draft and enforce their own policies that clarify what resources are available, under what circumstances they are willing to utilize those resources, and for what purposes. The committee also notes that for their protection, employees should have the right to remove themselves from participating if they do not agree with the procedures.

Since the publication of "Use of reproductive technology for sex selection for nonmedical reasons," the report has been used as an ethical framework by physicians and clinics that provide those services. After the publication of the report, more ART clinics began offering sex selection services for nonmedical purposes, although no direct correlation has been proven. For example, in October 2017, researchers surveyed 493 ART clinics in the US to collect data on sex selection services. The findings, published in the *Journal of Assisted Reproduction and Genetics*, showed a substantial increase in the percentage of clinics who offer sex selection for nonmedical purposes since the last survey was conducted eleven years prior. According to that report, 83.5 percent of clinics offer sex selection for family balancing purposes, and 74.6 percent offer sex selection for non-specific elective reasons.

Sources

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