1. Mark your confusion.
2. Show evidence of a close reading.
3. Write a 1+ page reflection.

# Should Parents Be Allowed to Choose The Sex of Their Baby? 

Source: Juan Andrade, CNN.com, February 29, 2016
Many couples trying to conceive a child have at least some inkling of whether they want a girl or a boy. These preferences have made some resort to less-than-surefire methods, from taking vitamins to timing when they have sex in order to influence gender.

But with the growing popularity of in vitro fertilization, more and more parents-to-be are gaining the ability to determine, with almost $100 \%$ certainty, the gender of their baby. This week, model Chrissy Teigen and her husband, singer John Legend, announced they not only wanted a girl but chose the gender of their baby, a daughter, due this spring.

But decisions over whether couples should be given this choice, and what the consequences of it could be, are anything but certain.

Doctors have been grappling with these questions for years. In 1999, the American Society for Reproductive Medicine, a professional organization, held the opinion that using IVF for sex selection should "not be encouraged." But last year, the group eased its stance and urged clinicians to develop their own policies as to whether or not to offer the service in their practice.
"From my own personal perspective, I don't think there's anything unethical about any of it; however, it's ethically controversial," said Dr. Mark Sauer, chief of the division of reproductive endocrinology and infertility at Columbia University Medical Center.

Some people view choosing the gender of the baby as a part of the concern that IVF is upsetting a natural process, and those concerns date back to the first IVF baby born in 1978, said Sauer, who is a member of the American Society for Reproductive Medicine Ethics Committee, which issues opinions about assisted reproductive technologies.

Some of the loudest outcry over sex selection and IVF in general can be heard in the public response to celebrity news. Teigen faced an uproar when she announced that she chose to have a female embryo implanted after she and Legend underwent IVF because they had difficulty conceiving. People wondered publicly whether Kim Kardashian and Kanye West selected the sex of their baby boy born in December.

But what are the most common concerns that experts and the general public have over sex selection?

## It is not safe for the embryo

IVF on its own does not reveal anything about the sex of the embryo. In the conventional method, a doctor retrieves a woman's eggs and fertilizes them in a Petri dish. After letting the resulting embryos grow for a few days, the doctor looks at them under the microscope and implants one (or more) of the embryos that appear to be most viable in the woman.

However, over the last 20 years, women and couples have increasingly had the option of adding a screening step to their IVF cycle, which determines a lot about the embryos, including gender. In 2013, 6\% of IVF procedures involved screening for specific diseases. A 2008 survey of clinics in the United States found that $74 \%$ offer the service.

One type of more general screening, known as pre-implantation genetic screening or PGS, involves taking one cell from the embryo and looking at its chromosomes. The rest of the embryo is frozen while doctors carry out the test. It helps doctors determine which embryos are most viable and rule out chromosomal abnormalities responsible for conditions such as Down syndrome and Turner syndrome.
"Inherent to (all these types of) screening is knowing the sex as well," Sauer said.
Sauer lets couples decide if they want to know the sex of the embryos and if so, to choose which to implant. They know the questions are coming -- it's part of the informed consent when couples order the screening -- and most of them do want to know the sex of the embryos and also want to decide which gender to implant, Sauer said.

Some doctors have argued that manipulating the embryo in order to do the screening carries "intrinsic risk" to the embryo. Despite these concerns, there is currently no evidence that it is unsafe, Sauer said. "But
when you've got millions of babies (who were screened in this way), you get less and less concerned that you are doing harm," he said.

Likewise, there is growing evidence that IVF in general is safe, Sauer said. A 2015 study looked at more than a million assisted reproductive technology procedures between 2000 and 2011 and found no evidence for concerning complications, although there were increases in reports of ovarian pain and other side effects.

If anything, the screening step may lead to safer pregnancies. The better job doctors can do at determining which embryos are most viable, the more likely they may be to implant only one embryo and reduce the "epidemic of multiple births in this country," Sauer said. "In the future, it may become the standard of practice to screen almost every embryo."

## It could lead to gender bias

So far there is no evidence, at least in the United States, that giving couples the option of selecting the sex of their child could lead to a surplus of girls or boys. "Let's face it, there is discrimination against women, but I don't sense in the practice of assisted reproductive technology, at least in my experience, there is an overwhelming bias" toward one sex or the other, Sauer said.

There are concerns, particularly in some Asian countries, about societies valuing boys more than girls, "but to some extent this could be a cultural stereotype," said Brendan Foht, assistant editor of The New Atlantic, a journal that publishes articles by experts and the general public on bioethical issues.

Even if sex selection is not likely to skew the gender ratio in the United States anytime soon, there is a general philosophical concern that parents should not have this level of control over their offspring. "Sex selection kind of undermines the concept of unconditional love and obligation by making the love conditional upon the child being a certain thing, in this case, a boy or a girl," Foht said.

Sauer is less worried that choosing gender will affect how a parent loves their child. "They really just want to have that experience. They love their children. It's not like they think one sex is better than the other, but they think, 'Wouldn't it be nice to have a child of (this) gender?'" he said. This kind of thinking sometimes happens if, for example, a couple already has three boys and wants to try for a girl, a concept sometimes called "family balancing."

## It could divert resources away from medically necessary IVF

Currently, the only reliable way for parents to "balance" their family in terms of the sexes of their children is through IVF -- although it is possible to some extent to select for gender using intrauterine insemination, by separating female and male sperm. This is a much less precise science. "The best techniques are about $90 \%$ to $95 \%$ successful," but there's a lot of variation, Sauer said. In contrast, the reliability of sex selection using IVF is about $100 \%$.

## Join the conversation

Still, there are probably not a lot of couples that specifically carry out IVF in order to be able to choose the gender of their child. But it's hard to know for sure. IVF clinics do not have to report on the motives of their clients. Currently federal law requires fertility clinics to report their success rates, but other aspects, such as clients' reasons for using assisted reproductive technology or why they decided to have screening done, are not included in the data reporting.
"It's a for-profit industry, so if customers come in with some idiosyncratic desire for IVF, they're probably not going to turn them away," Foht said. Nevertheless, some insurance plans do cover IVF, as well as screening, and in these cases it's conceivable that there could be competition for limited IVF resources, he added.

A number of countries, including the United Kingdom and Canada, have placed bans on sex selection for "social uses," as opposed to when it is used to avoid the risk of sex-linked diseases, such as Duchenne muscular dystrophy, which primarily affects boys. However, ethicists have challenged these types of bans, arguing that sex selection will not lead to gender imbalance in the population.

## Possible Response Questions:

- Should parents be allowed to choose the sex of their child? Explain.
- Pick a passage from the article and respond to it.

