DEBATE concluded

Ethics of sex selection for family balancing

Why balance families?

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Pennings (1996) suggested that sex selection should be allowed to be used for family balancing (i.e. for restoring equal representation of the genders of children in a family), under certain circumstances. Sex selection is a complex topic which brings into play many ethical, cultural, social and biological factors. Given this, we consider that the guidelines proposed by Pennings overlook many ethical aspects of sex selection, some basic aspects of human biology and social behaviour, many of the reproductive choices relevant to family formation in different cultures, as well as some important practical issues about implementation.

Proposed guidelines

The guidelines proposed for sex selection are that: (i) it is not allowed for the first child; (ii) that it is not allowed when there is a gender balance in the family, although whether it should be permitted after the birth of the first child to prevent an imbalance in the family, or reserved for after the birth of the second child to correct any imbalance present, remains undecided, (iii) the sex selected can only be that of the less represented gender in the family; except when (iv) the prevention of the birth of a child of a certain sex is advisable on the basis of increased genetic risk.

Although we support the last of these proposed guidelines, which aims to prevent the birth of any child affected by a serious genetic disease or disorder, we believe it is unlikely that the introduction of these guidelines will function as planned, to achieve the equality of the sexes. Whether these guidelines are consistent with social or individual expectations about reproduction and family formation requires some examination.

These proposed guidelines leave unanswered many questions about using sex selection, which are underpinned by consideration of whether the allocation of resources required for sex selection can be justified from an economic and social perspective. Some of the issues that are ignored and some of the problems raised by the guidelines proposed will be discussed below.

Ignoring the right to reproduce

The 'United Nations Declaration of Human Rights' (1968) states that each individual has the right and freedom to form a family. Its application to assisted reproductive technology has yet to be clarified, as with recent issues raised that relate to the declaration coming to terms with the need for population control and the wish to use sex selection. This declaration, however, does provide underlying principles that are required to be respected in family formation.

The first guideline proposed by Pennings states that sex selection is not allowed for the first child. Irrespective of whether one supports the use of sex selection, this proposal is a violation of the right to freely form a family given in the Declaration of Human Rights, and given that the appropriate technology is available.

Ignoring restrictions on reproduction

For the second guideline proposed to be applied in sex selection, a couple should have had one, if not two, children of the same gender. For many couples in countries such as China, applying this proposition is out of the question and illegal. The situation created by implementation of this guideline is one of conflicting requirements.

On the one hand, the UN declaration sanctions the individual's right to reproduce and form a family freely, while on the other hand, legislation mandates that a couple can have only one child. How might this dilemma be resolved, if a couple has a social or economic preference for their child to be of a particular sex?

If the couple is to be denied the opportunity of using available technology, but obliged to comply with their country's law, is this prohibition on using the available technology just? We would argue that it is not. When there is a legal family size limitation, it is difficult to justify concurrently a limit to the use of available technology. When reproduction is restricted for sound population reasons, why should the couple not be allowed to choose the sex of their child? On this basis, we believe that the second guideline proposed for the acceptability of sex selection is neither just, nor practical.

It may be argued that to allow the use of sex selection for the birth of the first child will result in a severe distortion of the sex ratio. There is some evidence available from gender selection clinics to indicate that at least in Western societies this is unlikely, although caution is also given about the possible need for future monitoring of the sex ratio in some regions of the world (Liu and Rose, 1995). One question is raised immediately by fear of distortion of the sex ratio: 'at what age would any distortion of the sex ratio become important?'

The sex ratio in different populations can change throughout childhood, in a way which is related to gender and birth-order (Choe et al., 1995) or later in life due to differential exposure to risk factors (Zhang et al., 1995). The sex ratio is not something that can be fixed at birth, or by balancing families. It undergoes constant changes throughout a lifetime (Clark and Mittwoch, 1995).

To be realistic about the effects of imposed limitations on reproduction in countries such as China (Cheng, 1995) and India (Sachar and Soni, 1995), we need to consider whether we would...
prefer to outlaw sex selection of the first (and only) child, or by default perpetuate the infanticide of first-born females currently being practised in such countries (Breiner, 1992). The preference for a male to be the first born is an unfortunate, but true reflection of some cultures, which is unlikely to be reduced by a legal restriction on access to sex selection procedures.

**Ignoring restrictions on family size**

More questions are raised about the practicality of implementing the first three of these proposed guidelines when the couple themselves draw limits about family size, without any legal restrictions applying.

The proposed guidelines on sex selection are imprecise about whether such a decision should be made after the birth of the first or second child. But, what if a couple wish to have only one child? This choice may be brought about by economic or social factors. Are these couples also to be prohibited from choosing the sex of their only child? This proposition seems untenable, especially in a developed user-pays society. To prohibit such couples from using the available technology cuts across the prevailing individual freedoms and free-market mentality operating in such countries.

The requirement that couples need to have had one or two children before they can use sex selection is also at odds with the more advanced age at which many women in developed countries now marry and begin a family. Is it reasonable to compel these couples to have more than one child? Do we want to sanction bringing into existence more children than are wanted by their parents? We think not. This point is supported by the practical wisdom of child welfare agencies and psychiatrists in their case histories about child abuse (Adler, 1995). However, these consequences seem to have merited little thought in the formulation of the proposed guidelines.

**Who decides on a family balance?**

The third guideline proposed allows sex selection within a family, providing that the sex selected is of the less represented gender. This guideline denies the opportunity of having a family of children all of the same gender. Some couples may find it easier, for economic and social reasons, to adopt this option. Further, it seems that any argument forwarded to defend or deny the validity of balancing genders is also applicable to the situation of having a one gender family. Why is the gender balance within a family important? At what age will this balance be measured?

This proposed guideline also raises several questions about enforcement. Who will enforce these guidelines? How might they be brought into effect? Will couples or doctors find themselves under a compulsion to adhere to the guidelines? Are individual rights again to be over-ridden in this implementation?

The policy and practical aspects of implementing these guidelines in different cultures must be attended to, if the guidelines are to carry any credibility.

**Is allowing sex selection for 'family balancing' a responsible use of reproductive technology?**

The questions raised by Pennings' proposed guidelines are integral to any society's response to whether or not sex selection or preselection will be an acceptable option. Sex selection can be carried out at most stages of a pregnancy. For instance, it has been suggested that in India the increase in the number of males being born is the result of the selective abortion of female fetuses (Sachar and Soni, 1995).

The procedures to be used for sex selection under the proposed guidelines are not specified. What is clear, however, is that establishing facilities equipped to carry out sex selection is going to be a difficult task. Questions of availability, access and equity will further exacerbate the many problems that already accompany the introduction of these proposed guidelines.

The most feasible techniques that might be applied in sex selection are the use of sperm selection prior to the formation of an embryo, *in vivo* or *in vitro* (Johnston et al., 1993), embryo biopsy of the 4- or 8-cell *in vitro* embryo (Wilton and Trounson, 1987), or a combination of both techniques.

The question about sex selection now has gone beyond asking whether these practices are technically possible (Edwards and Beard, 1995), to focusing on the underlying ethical question of whether this use of reproductive technology is a responsible application of technologies that were developed to treat infertility and alleviate the birth of children suffering from serious genetic diseases? We think not.

For the most part, when not clinically indicated, the proposed use of gender preselection by fertile couples to balance their families is a response of the technology to little more than a social whim, which will have little effect on the sex ratio. Furthermore, the guidelines proposed carry no indication that sex selection will be introduced as an option that may be freely chosen by couples, or as a limitation that must be adhered to by all couples. There is also no appreciation that the introduction of such a structure will greatly reduce the resources available for the use of assisted reproduction in the treatment of infertility. In short: Why balance families?

**References**


