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Preconception gender selection: Ethical evaluation

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Outline

- 'Sexing' methods
- Reasons for sex selection
- Ethical analysis
- Conclusions

Methods for sex selection

I traditional wisdom/folklore

II medical technology

1. prenatal testing (CVS→NIPD)
2. PGD
3. preconception sex/sperm selection
→IUI/IVF

Focus on II.3

Methods for Preconception sex selection (PCSS)

Best option: flow cytometric sorting of sperm (FC)

Summary of a clinical trial*

- pregnancy rates comparable to use of unsorted sperm;
- XSort → 92% females; YSort → 82% males;
- no increase of major congenital malformations (caution).

* Karabinus, Theriogenology 2009

Reasons for sex selection

A. medical: sex-linked disorders

B. non-medical: incl. family balancing

C. intermediate or indirectly medical:
avoid transgenerational health risks.
Case: a haemophiliac male wants to
avoid the conception of *daughters* (all
obligate -healthy- carriers)

Focus on (II.3.)B & C

PCSS for *non*-medical and *indirectly* medical reasons: types of ethical questions

1. Can PCSS be morally justified?
2. If not or undecided: is PCSS to be prohibited?
3. Should PCSS, if morally justified, be collectively financed?

Focus on 1. Let me simply presume here that SS for non-medical reasons should not be financed collectively.

Current regulations

Societies of reproductive medicine:

- ASRM
- ESHRE

(Trans-)national legal regulations:

- Convention on Human Rights and Biomedicine
- UK/HFEA (Masterton case)
- The Netherlands
- Germany

Can PCSS for *non*-medical reasons be morally justified?*

Direct/deontological objections: valid?

1. 'Against nature'? From is to ought - a debatable premiss. Selective use of the objection. The nature of humans is to intervene in nature.
2. 'Inherently sexist'? People may well have non-sexist motivations; they may, for example, simply prefer a mixed family.

* Warren MA. Gendercide. Totowa: Rowman & Allenheld, 1985.

PCSS for *non*-medical reasons: morally justified? (cont.)

3. 'At odds with the aims of medicine'? Presumes a debatable, essentialist view of medicine. Selective use of the objection.
4. 'Against the child's right to an open future'? Wider and stricter interpretations. The 'neutrality' of sex.

PCSS for *non*-medical reasons: morally justified? (cont.)

Indirect/consequentialist objections: valid?

1. An increasing sex ratio? Obviously, in China and India ..., but in most European countries, most people don't mind or prefer a balanced family.
2. A monopolization of 'the eldest-child bonus' by boys? Evidence? Anyhow, this objection does not apply to family balancing.

PCSS for *non*-medical reasons: morally justified? (cont.)

3. The slippery slope argument: PCSS sets a precedent for selection for other non-disease traits. Empirical and logical versions. How slippery is the slope? The moral relevance of 'general purpose means'.
4. What about the welfare of the child, esp. in view of the (present) suboptimal reliability of 'failures' ('wrong' sex) after FC?
Evaluation standard: a high risk of serious harm (HRSH) to the child.

PCSS/FC: what about the suboptimal reliability? (cont.)

Policy options, taking account of the HRSH standard:

1. don't provide FC, as the risk is high and serious. This, however, seems to be unconvincing, esp. if FC is restricted to family balancing →
2. A. just provide FC, as the risk is low;
B. provide FC only on conditions:
 - risk evaluation: controlled trial *and/or*
 - risk reduction/elimination: add PGD as a back-up→2 variants:
 - the combi is just an option: FC may well be a stand-alone;
 - the combi is a 'coercive offer': people get access to FC only if they accept PGD as a back-up. Problematic ...

Obviously, the combi

- presumes that PGD may be justified for non-medical reasons too
- raises questions that go beyond the scope of this presentation.

Conclusions reg. PCSS for *non*-medical reasons

1. The objections seem to be rather weak, not strong enough to justify a *categorical* moral rejection – let alone a legal prohibition.
2. PCSS for non-medical reasons may well be morally justified and allowed on conditions, incl.
 - only for family balancing;
 - only in licensed clinics: registration;
 - only in the context of a research project: study possible demographic effects and risks for the children.
3. Research into the further improvement of sperm-sorting techniques should be stimulated.

PCSS for *indirect* medical reasons

Medical vs non-medical: a simplistic dichotomy.

Serious reproductive concerns of future carrier daughters.

The moral relevance of transgenerational health risks.

In view of the lower reliability of FCSS for conceiving *boys*, (the combination with) PGD is morally justified.*

De Wert. Hum Reprod 2005