

## Ethics, legal, social, counselling

# Attitudes towards preconception sex selection: a representative survey from Germany



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#### **Abstract**

Within the next parliamentary term, the German government is expected to replace the current Embryo Protection Act with a new Human Reproductive Technology Act. Before introducing new legislation, policy makers may want to survey public attitudes towards novel applications of reproductive technology. In order to assess opinions and concerns about preconception sex selection for non-medical reasons, a social survey has been conducted in Germany. As a representative sample of the German population, 1005 men and women 18 years and older were asked whether or not preconception sex selection should be made available. Of the respondents, 32% held that sex selection should be strictly prohibited, be it for medical or non-medical reasons, and 54% accepted the use of preconception sex selection for medical purposes. Only a minority of 11% approved of the use of preconception sex selection for non-medical reasons. The widespread opposition to a freely available service for non-medical sex selection is based on several claims: 87% of respondents hold that 'children are a gift and deserve to be loved regardless of any characteristics such as beauty, intelligence or sex'; 79% argue that choosing the sex of children is 'playing God'; 76% are opposed because it is seen as 'unnatural'; 49% are afraid that it is 'skewing the natural sex ratio'; and 40% consider it to be 'sexist'.

Keywords: preconception sex selection, public attitudes, social policy

#### Introduction

Within the next parliamentary term, the German government is expected to pass a new law on assisted reproductive technologies. The anticipated Human Reproductive Technology Act is intended to regulate reproductive cloning, preimplantation genetic diagnosis, preconception sex selection, oocyte donation, embryo adoption, surrogacy, postmenopausal motherhood and access to assisted reproductive services by single women and lesbian couples.

Passing new legislation requires a thorough examination of the moral, legal, and social implications of reproductive technologies. Among the most pressing questions policy makers will have to address are: What exactly is procreative liberty? When, if ever, is the state entitled to interfere with the reproductive choices of its citizens? Do some reproductive technologies violate the principle of human dignity? How is the practice of assisted reproduction to

be regulated to guarantee the welfare of children? Who should bear the costs of assisted reproduction? What is the proper role of the physician?

Although public policy is not – and ought not to be! – based on a majority vote of the electorate but rather on the protection of constitutionally guaranteed rights, decision makers will be well advised to survey public attitudes towards new applications of assisted reproductive technology. To assess opinions and concerns about preconception sex selection for non-medical reasons, a social survey was conducted in Germany.

#### Method and results

Using omniTel<sup>®</sup>, a randomized, computer-assisted telephone interview tool provided by FORSA (the German Institute for Social Research and Statistical Analysis; Gesellschaft für Sozialforschung und statistische Analysen mbH, Berlin,

Germany), 1005 men and women aged 18 years and older were consulted about their attitudes towards preconception sex selection. The response rate was 71.2%. Participants were informed about the recent development of a new reproductive technology enabling parents for the first time to select the sex of their children prior to conception. This new technology, they were told, could be employed for two purposes. First, it could be used by couples who are carriers of a sex-linked genetic condition such as haemophilia in order to avoid passing it on to their offspring. Second, it could be used by couples who already have one or more children of the same sex and desire to have at least one child of the opposite sex. Interviewees were then asked: should preconception sex selection (i) be strictly prohibited, (ii) be only available to couples at risk of transmitting a sex-linked genetic condition, or (iii) be available to all couples requesting it? (See Table 1 for questionnaire.)

Of the respondents, 32% held that preconception sex selection should be strictly prohibited, 54% thought it should only be available to couples at risk of transmitting a sex-linked genetic disorder, and only a minority of 11% was in favour of making sex selection available to all couples requesting it (see **Table 2**).

Men and women differed significantly in their attitudes towards preconception sex selection. Men (14%) were much more in favour of non-medical sex selection than women (8%), and men (29%) were also less inclined to put a total ban on preconception sex selection than women (35%).

Even more striking than the differences between men and women were the differences between the generations. Whereas 40% of those aged 60 and older would like to see preconception sex selection being strictly prohibited, only 26% of the 18- to 29-year-

#### Table 1. Questionnaire.

Scientists have developed a new reproductive technology enabling parents for the first time to select the sex of their children prior to conception.

This technology could be used by couples who are carriers of a sex-linked genetic condition. Sex-linked genetic conditions are disorders, such as haemophilia, which are usually passed on to boys only. Couples knowing to be at risk of passing on a sex-linked genetic condition may want to choose a girl to be sure to have a child free of the disease.

The technology could also be used by couples who already have one or two children of the same sex and wish to have at least one child of the opposite sex.

What do you think, should this technology be:  strictly prohibited only available to couples at risk of transmitting a sex-linked genetic condition available to all couples requesting it undecided?
If you are opposed to making sex selection available to all couples requesting it, what are your reasons for holding this view? Please select from the following list of objections. (In case your opposition is based on several concerns, you are allowed to mark more than one objection.)
Sex selection for non-medical reasons should not be made available because:  children are a gift and deserve to be loved regardless of personal attributes such as beauty, intelligence or sex it is playing God it is unnatural it is skewing the natural sex ratio it is sexist.

**Table 2.** Attitudes towards preconception sex selection. Values are percentages.

Preconception sex selection should be	'Strictly prohibited'	'Available for medical reasons only'	'Available to everyone requesting it'	'Undecided'	
Total	32	54	11	3	
Men	29	55	14	2	
Women	35	53	8	4	
18-29 year olds	26	62	10	2	
30–44 year olds	29	61	10	0	
45–59 year olds	32	56	10	2	
60 years and older	40	39	11	10	

**Table 3.** Reasons for opposition to non-medical sex selection.

Non-medical sex selection should be banned because	Total %	Men %	Women %	18–29 year olds %	30–44 year olds %	45–59 year olds %	60 years and older %
'Children are a gift and deserve to be loved regardless of any characteristics such as beauty, intelligence or sex'	87	84	90	88	89	87	85
'It is playing God'	79	75	82	85	78	79	77
'It is unnatural'	76	73	78	71	75	77	78
'It is skewing the natural sex ratio'	49	45	52	42	42	53	58
'It is sexist'	40	36	42	32	35	41	49

olds were in favour of a total ban. Likewise, while only 39% of those aged 60 and older approved of the use of preconception sex selection for medical reasons, 62% of the 18- to 29-year-olds endorsed it. Interestingly enough, in regard to non-medical sex selection, the generations did not differ at all. The older generation (11%) was as accepting of it as the younger one (10%).

In order to identify the concerns underlying the widespread enmity to non-medical sex selection, participants averse to it were asked about the reasons for their opposition. To be able to quantify their responses, a list was prepared of the most common objections to sex selection. Given that opposition to non-medical sex selection is usually based on several claims, interviewees were permitted to choose more than one objection. In all, 87% of respondents disapproved of non-medical sex selection because they held that 'children are a gift and deserve to be loved regardless of any characteristics such as beauty, intelligence or sex'; 79% thought that choosing the sex of children was 'playing God'; 76% were opposed because it was seen as 'unnatural'; 49% were afraid that it was 'skewing the natural sex ratio'; and 40% considered it to be 'sexist' (see **Table** 3)

### Discussion

The present survey appears to be complementary to a previous survey of ours. In 2003, 1094 German men and women between the age of 18 and 45 were asked about their gender preferences and their interest in employing sex selection technology. Only 6% of respondents indicated that they were inclined to choose the sex of their prospective children (Dahl *et al.*, 2003). Up until now, one could only speculate as to why there was so little interest in using preconception sex selection in Germany. In the light of the present survey, however, it is safe to assume that the lack of interest in sex selection is largely due to the fact that the overwhelming majority of Germans are strongly opposed to it.

The two surveys add up to a fairly clear picture of the actual attitudes towards preconception sex selection in Germany. Thus it could be said that approximately 30% of Germans are opposed to any form of preconception sex selection; about 60% approve of its use for medical purposes only; roughly 10% accept its use for non-medical reasons; and about 6% of the latter would consider using it themselves.

According to section 3 of the German Embryo Protection Act, preconception sex selection for any but the most serious of medical reasons is strictly prohibited and punishable by 1 year of imprisonment (German Parliament, 1990). Given the public opposition to non-medical sex selection revealed by this survey, German policy makers may be tempted to uphold the law, claiming that a ban on sex selection for non-medical reasons clearly reflects the value of its citizens. Although the present study does not seek to make a case for non-medical sex selection, it needs to be emphasized that basing legislative measures on the results of a survey would constitute a highly misguided approach to public policy. As is widely acknowledged, opinion polls on new reproductive technologies typically yield gut reactions rather than reasoned responses. Since it is desirable to adopt a rational approach to public policy, political decision-making should be based on arguments and not on repugnance.

Emphasizing that public opinion surveys present an inappropriate foundation for legislative measures may amount to stating the obvious. However, the Human Fertilisation and Embryology Authority's (HFEA) recent public consultation document 'Sex Selection: Options for Regulation' clearly indicates the need to reiterate this point. Based on a representative social survey showing that more than 80% of Britons are opposed to making sex selection available for nonmedical reasons, the HFEA advised the Department of Health to outlaw any kind of non-medical sex selection (HFEA, 2003). Given that the HFEA's recommendation was evidently based on the 'general moral consensus in the United Kingdom against parents selecting the sex of their children', the HFEA's report has met with severe criticism (Harris, 2003; Dahl, 2004; Pennings, 2004; Robertson, 2004; Schulman, 2004; Tizzard, 2004). Whatever the merits or deficiencies of its public consultation document, the HFEA's recommendations raise the question of what constitutes the proper role of opinion surveys. From the point of view of the authors, the answer is obvious: the purpose of a social opinion survey is to explore public attitudes and to identify public concerns enabling policy makers to address the concerns in question through clarification and education.

As already pointed out, this paper does not advocate legalization of non-medical sex selection. Yet one thing should be clear: there may be many reasons for outlawing sex

selection, but widespread opposition expressed in a public opinion survey is certainly not one of them.

#### References

- Beier H 2003 German Embryo Protection Act (translation). Reproductive BioMedicine Online 6 (comp. 1), 91–93.
- Dahl E 2004 The presumption in favour of liberty: a comment on the HFEA's public consultation on sex selection. *Reproductive BioMedicine Online* **8**, 266–267.
- Dahl E, Beutel M, Brosig B, Hinsch K-D 2003 Preconception sex selection: a representative survey from Germany. *Human Reproduction* 18, 2231–2234.
- Harris J 2003 Regulated hatred. *The Independent*, 27 November 2003, p. 19.
- Human Fertilisation and Embryology Authority 2003 Sex Selection: Options for Regulation. A Report on the HFEA's 2002–2003 Review of of Sex Selection Including Discussion of Legislative

- and Regulatory Options. London, UK.
- Pennings G 2004 Sex selection, public policy and the HFEA's role in political decision making response to Edgar Dahl's 'The presumption in favour of liberty'. *Reproductive BioMedicine Online* **8**, 268–269.
- Robertson J 2004 Gender variety as a valid choice: a comment on the HFEA response to Edgar Dahl's 'The presumption in favour of liberty'. *Reproductive BioMedicine Online* **8**, 270–271.
- Schulman JD 2004 An attempted suppression of liberty. *Reproductive BioMedicine Online* **8**, 374–375.
- Tizzard J 2004 Sex selection, child welfare and risk: a critique of the HFEA's recommendation on sex selection. *Health Care Analysis* **12**, 61–68.

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