

# Anonymous or identity-registered sperm donors? A study of Dutch recipients' choices

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**BACKGROUND:** The aim of the present study was to gain insight into parents' own donor preferences within a system offering the choice between an anonymous and identity-registered donor. A comparison was made between recipients choosing for an anonymous donor (AD choosers) and those choosing for an identifiable donor (ID choosers) with regard to their sexual orientation, demographic characteristics, disclosure issues and infertility distress. **METHODS:** Data from 105 couples (61% heterosexual, 39% lesbian) were registered on a standardized form during implication counselling sessions previous to treatment. **RESULTS:** Sixty-three per cent of the heterosexual couples and 98% of the lesbian couples had chosen an ID donor. Major differences between ID and AD choosers were identified. Among the ID choosers secrecy towards the child was no option, whereas 83% of the AD choosers did not intend to inform their child. Compared with heterosexual ID choosers, AD choosers were more distressed about their infertility and had a lower educational level. **CONCLUSION:** Legislation imposing ID donors appears to be acceptable for the majority of this study population. For a vulnerable group of heterosexual couples, who remained secretive about the use of a donor, adaptation to the new system is not self-evident.

*Key words:* anonymity/disclosure/donor insemination/identity-registered/sperm donors

## Introduction

In June 2004, after more than 10 years of political debate it has become compulsory in The Netherlands to use identity-registered gamete donors. Identifying information will be released to donor offspring on reaching the age of 16 years. There is now a growing public conviction that donor children, just like adopted people, have the right to know their genetic origins and/or biological parents. With the introduction of this legislation, The Netherlands follows an international trend in which (identifying) donor information is registered in donor insemination (DI) practice (Human Fertilisation and Embryology Authority, 2002; American Society for Reproductive Medicine, 2004).

However, legislation imposing identity release donors has little impact as long as the parents concerned do not intend to inform their child about their conception method (Pennings, 2001). Studies carried out in the past 20 years were unanimous: the majority of parents remained secretive about DI and their children were unaware of their DI origin (Nachtigall *et al.*, 1998; Gottlieb *et al.*, 2000; Brewaey, 2001; Golombok *et al.*, 2002). More recently however, a number of studies reported a growing number of DI parents intending to disclose the donor origin to their child and parents who intended to inform their child were more in favour of identifying donor information (Adair and Purdie,

1996; Rumbal and Adair, 1999; Hunter *et al.*, 2000; Scheib *et al.*, 2000; Lycett *et al.*, 2004).

Undoubtedly, parental attitudes about the role of the donor within their family will influence their children's donor concept and their future need for donor information.

As few candidate parents were offered the choice between either an anonymous or identifiable donor in the past, little is known about their own donor preferences.

The aim of the present study was to gain insight into parents' own donor choices and motives within a system where they had the freedom to choose. The double track system was introduced at the Fertility Centre of the Leiden University Hospital in 1994. In this system, applying couples had the choice between an anonymous donor (AD) and an identity-registered donor (ID). By choosing for the latter, both non-identifying and identifying donor information would become available for donor offspring once reached the age of 16 years.

Donor choices and motives were investigated by focusing on the following questions: (i) what was the number of AD and ID choosers and which motives determined their final choice? (ii) What was the relationship between donor choice and the intention (not) to inform offspring? (iii) Were there any relevant differences between AD choosers and ID choosers with regard to their sexual orientation, their demographic

characteristics such as age, religion, educational level and ethnicity, and the perceived male infertility distress?

## Materials and methods

### Materials

All 105 recipients applying for a first child between January and December 2003 were included in the study. Sixty-one per cent ( $n = 64$ ) were heterosexual and 39% ( $n = 41$ ) were lesbian couples (Table I).

Demographic features did not differ significantly between partners, regardless of their sexual orientation. All data refer therefore to the biological mother. Only one significant difference was found between heterosexual and lesbian couples: lesbian mothers' educational level was higher (Mann–Whitney  $U = 826.5$ ,  $P = 0.032$ ). The mean age of the biological mothers was 33 years, 84% were Caucasian and 60% reported themselves as religious. Among the heterosexual couples, the most frequent indication for DI was azoospermia or extreme oligozoospermia, excluding the possibility of other fertility treatment options.

### Methods

In the clinic, DI treatment is based on a written protocol including the following topics: (i) the inclusion criteria concerning the age, the partner status and the general health of the recipients; (ii) an implication counselling programme which offers participants the choice between an anonymous and identifiable sperm donor; (iii) donor screening and donor matching procedures; and (iv) treatment procedures. All recipients were counselled in two to five 1 h sessions before starting treatment. Information was first provided about all aspects of the clinics' DI protocol. Then the following topics were discussed: (i) consequences and risks of secrecy/disclosure towards child and others; (ii) consequences and risks of choosing an anonymous/identity release donor; (iii) issues to be considered when raising a DI child.

All 105 recipients of the study group followed this counselling programme. Although no *a priori* advice was provided about the donor choice, 16% ( $n = 10$ ) of the heterosexual candidate parents

changed their initial choice from an anonymous to an ID donor. The data presented here were those of their final choice. As there was no shortage of ID donors, waiting lists for both donor types were equal and did not influence final choices.

Data for this study were collected during the counselling sessions with both partners. The first author conducted all sessions. Data concerning the following topics were registered on a standardized form: demographic features, donor choices and disclosure issues, alternative options for realizing the child project. For the group of heterosexual couples, a self-developed rating scale was used to measure the observed distress of the male partner with regard to his infertility: (i) 'minor' was rated when the male partner went through an initial period of grief emotions after the diagnosis but had recovered by the time of the interview/when he could communicate with his partner and significant others about the problem; (ii) 'moderate' was rated when the male partner went through an initial period of intense grief emotions and when certain negative feelings were still present during the interview/when he felt uncomfortable talking about his problem to his partner and significant others; (iii) 'major' was rated when negative feelings (depression, anger, shame, anxiety) about his infertility were still observed during the interview/when communication between partners was difficult and he did not want his partner or himself to talk with significant others. No reliability or validity tests were performed. These data were collected as part of a first measurement in a longitudinal follow-up study. Since the majority of data were of nominal/ordinal level, non-parametric statistics were performed by means of SPSS 11.00; all significance levels are two-tailed.

Data about candidate parents' donor choices and motives were analysed qualitatively. Choices for an anonymous (AD) or identity-registered (ID) donor were registered at the start of the first counselling session. The questions investigating underlying motives were open-ended and the answers were transcribed. During the last counselling session, donor choices and motives were questioned in a similar way and again transcribed in order to detect potential changes as a result of the information provided by the counsellor. If differences did exist (16% of the heterosexual couples), only the final decision and underlying motives were reported. In the qualitative analysis of the transcripts, we first looked for the recurrent themes in the reported motives. Then we searched for relevant variations and divergences among the respondents' answers (Barker *et al.*, 1994).

**Table I.** Population characteristics

No. of candidates	
Lesbian couples	41 (39)
Heterosexual couples	64 (61)
Total	105
Age of biological mother [years; mean (range)]	33 (22–39)
Highest educational level of biological mother*	
No secondary qualification	41 (39)
Secondary qualification	13 (12)
Higher education/higher degrees	51 (49)
Religion of biological mother	
None	42 (40)
Protestant/Catholic	43 (41)
Islam	7 (7)
Other	13 (12)
Ethnicity of biological mother	
Caucasian	88 (84)
Non-Caucasian	17 (16)
Indication for DI in heterosexual couples ( $n = 64$ )	
Azoospermia/extreme oligozoospermia	51 (79)
ICSI failure	10 (16)
Genetic indication	2 (3)
HIV <sup>+</sup> status (%)	

Values are number (%) unless otherwise stated.

\* $P < 0.05$ .

## Results

### Donor choices

The number of candidate parents choosing an identifiable donor was 63% ( $n = 40$ ) for the heterosexual couples and from 98% ( $n = 40$ ) for the lesbian couples.

Motives for choosing an identifiable donor did not differ between heterosexual and lesbian couples. The great majority pointed to 'the right of the child' to know its genetic origins. However, recipients differed in the importance attached to identifying donor information. For some, DI would not have been an option if only anonymous donors were available. For others, anonymity would have been a second best choice. All couples realized that their interests differed from their child's. Although the majority of future parents expressed the wish not to become involved with the donor, they decided that it was not for them to block the child's access to donor information. Realizing that their child would grow up in

a country where the majority of DI children would have access to donor information also influenced some parents' decisions. Also of importance was the possibility of obtaining access to the donor's medical records.

More lesbian (80%) than heterosexual couples (18%) had previously searched for a known donor between family and friends. Arguments in favour of a known donor were the opportunity to choose themselves the donor that fitted best into their lives and the possibility of revealing the donor's identity before the child had reached the age of 16 years. Divergent views concerning the donor's future parental role were the main reasons for not continuing with this option.

The major motive of the (heterosexual) candidate parents choosing an anonymous donor was fear of interference from an unknown party within their family life. The wish to become a normal family, just like anyone else, was frequently mentioned. More men than women pointed to the donor as a potential threat. Men were anxious that knowing the donor would negatively influence the child's love for them as social fathers. A minority believed that knowing the donor's identity would not improve the child's well-being and could even be harmful.

### Differences between AD choosers and ID choosers

A comparison between couples choosing for an anonymous or identity release donor is only relevant for the group of heterosexual couples since all but one lesbian couple belonged

to the group of ID choosers. In what follows, the group of heterosexual couples will be considered (Table II).

### Disclosure issues

Did AD choosers differ from ID choosers with regard to their intention to inform their child? Almost all ID choosers (93%) would tell their child about their donor conception; the remaining 7% had not decided yet. This is in sharp contrast with the AD choosers, of whom only 17% would disclose the child's conception method. Forty-eight per cent did not intend to tell and 35% remained uncertain ( $\chi^2 = 38.014$ ,  $P < 0.001$ ).

Both groups appeared to be careful when talking about DI to others; only 12% of the AD choosers and 25% of the ID choosers had informed 'many' people. More AD choosers told no one (63%) compared with ID choosers (27%) ( $\chi^2 = 7.621$ ,  $P < 0.001$ ). However, among those who intended to keep the donor origin secret from the child, or had not yet decided, 36% had told 'a few' people.

### Alternative options

Did both groups differ in their (previous and future) efforts to find alternative options for realizing their child project? Of the ID choosers, 49% had considered either adoption or a known donor whereas only 12% of the AD choosers had done so ( $\chi^2 = 8.786$ ,  $P < 0.02$ ) (Table II).

### Male infertility distress

Did men of both groups differ in the observed distress with regard to their fertility problem? Male distress scores in the group of AD choosers were significantly higher than in the group of ID choosers (Kruskal-Wallis,  $\chi^2 = 10.007$ ,  $P < 0.001$ ). In the former group, 12% of the men had a distress score 'minor', 33% 'moderate' and 55% 'major'. In the group of ID choosers, 36% had a distress score 'minor', 49% moderate and 15% 'major'.

### Demographics

Did AD choosers differ from ID choosers with regard to the following demographic variables: age of biological mother, highest educational level, religious affiliation and ethnicity of significant differences were only found for educational level ( $\chi^2 = 15.533$ ,  $P < 0.001$ ). The majority of AD choosers (73%) had an educational qualification lower than secondary level whereas this was the case for 30% of ID choosers. Half (48%) of the ID choosers received at least one form of higher education/university degree whereas only 9% of the AD choosers did so.

### Discussion

In 2003, all but one lesbian couple and 63% of the heterosexual couples opted for an identity-registered donor. A comparison with data collected in 1995 at the same fertility centre revealed that the number of ID choosers had increased markedly during the past 8 years. At that time, only 13% of the heterosexual and 42% of the lesbian couples were ID choosers (Bruyn de *et al.*, 1996). One must realize however,

**Table II.** Differences between recipients choosing an anonymous donor (AD choosers) and recipients choosing an identity-registered donor (ID choosers)

	AD choosers (n = 24)	ID choosers (n = 40)
Disclosure issues		
Tell child?***		
Yes	4 (17)	37 (93)
No	12 (48)	—
Uncertain	8 (35)	3 (7)
Tell others?***		
Many	3 (12)	10 (25)
A few	6 (25)	19 (48)
None	15 (63)	11 (27)
Alternative options*		
None	21 (88)	21 (51)
Adoption/known donor	3 (12)	19 (49)
Infertility distress male**		
Minor	3 (12)	14 (36)
Moderate	8 (33)	19 (49)
Major	13 (55)	6 (15)
Demographics		
Mean age of biological mother (years)	33	33
Religion		
None	10 (42)	16 (40)
Catholic/Protestant	10 (42)	16 (40)
Islam/others	4 (16)	8 (20)
Ethnicity		
Caucasian	17 (70)	35 (87)
Non-Caucasian	7 (30)	5 (12)
Highest educational level**		
No secondary qualification	19 (79)	12 (30)
Secondary qualification	2 (12)	9 (22)
Higher education/higher degrees	3 (9)	19 (48)

\* $P < 0.05$ .

\*\* $P < 0.001$ .

that the data from our study cannot be generalized to the total Dutch population of DI couples since our clinic has been known for years as one of the few offering a double track system. A study of a population recruited in a Californian sperm bank also offering both donor choices reported similar numbers: 79% of the recipients were in favour of an identity-registered donor (Scheib *et al.*, 2000). Although both samples remain unrepresentative, the results indicate that there is a group of future DI parents deliberately choosing for identifying sperm donors if they receive this opportunity.

In our population, lesbians outnumbered heterosexual recipients in their choice for an identifiable donor. Obviously, the absence of a male infertile partner spares them the stigma of infertility and, as there is no way to hide the use of a sperm donor, their children will be informed in an early developmental stage.

The great majority of the ID choosers, regardless of their sexual orientation, believed that the child had the right to know his/her genetic origins, although having access to the donor's medical records was also considered as a pro. Awareness of public opinion, demonstrated in carefully watched television programmes, and of upcoming legislation seemed also to have influenced their final choice. Despite the recognition of different interests between themselves (no interference) and their offspring (access to information), the child's well-being seemed to prevail. The heterosexual couples who chose an anonymous donor were mainly concerned with protecting the infertile husband and being a 'normal family'. It appeared as if their own fears restricted them to the adult perspective. If the child's perspective were to be considered, they believed that the donor offspring was better off not knowing. Similar differences in the motives of AD and ID choosers were reported in the study by Scheib *et al.* (2000).

A striking parallel between donor choices and disclosure issues was identified. The great majority of ID choosers, regardless of their sexual orientation, intended to inform their child whereas only 17% of the AD choosers would do so. Although the majority of parents in this study had the intention of informing their child, it remains to be seen whether they will actually do so. A number of authors point to the fact that there are no accepted tales available yet which might help DI parents to tell their children a comprehensive birth story (Cook *et al.*, 1995; Rumbal and Adair, 1999; Kirkland, 2003). Moreover, concerns about the impact of telling on the child and on the father-child relationship were frequently mentioned. This was also the case for parents who had already told or intended to do so in the near future (Hunter *et al.*, 2000).

Our findings concerning the heterosexual couples identified a number of important differences between those opting for an anonymous and identifiable donor. A choice for an anonymous donor was associated with a low socioeconomic status (79% lower than secondary level education), difficulties of coping with the male infertility (55% of the men: major distress) and secrecy towards the child (83% no disclosure). Alternative options such as adoption or using a known donor were only considered by 12% of these recipients. This

contrasts sharply with the overall picture of the ID choosers. The majority was socioeconomically privileged (48% at least higher education), men dealt better with their fertility problem (only 15%: major distress) and secrecy towards their child was no option. Almost half of them had considered adoption or a known donor as an alternative for DI.

Another study investigating possible differences between English DI couples who intended to disclose and couples who did not, observed a comparable divergence between groups (Salter-Ling *et al.*, 2001). Couples choosing for secrecy were more distressed about their infertility and had a lower educational level than those choosing for disclosure.

Undoubtedly, the associations found between donor choices, educational level and infertility distress are intriguing. We believe that these associations are strongly influenced by the sociocultural environment of the couples involved. AD choosers live more often in a lower socioeconomic context where other family values prevail. Male infertility and non-genetic parenthood remains more of a taboo whereas childlessness is less accepted. Such values might have influenced the high infertility distress observed in most of the men and the decision not to disclose DI. However, the current study design does not allow firm conclusions yet. Further research with more sophisticated measures is needed to disentangle the complex relationships between potential social stigmatization, well-being and donor choices.

Little is known about the impact of parental donor choices on children's development. Comparative studies investigating family functioning and child development between DI and naturally conceived families failed to find any relevant difference (Golombok *et al.*, 1996, 2002). As the great majority of the DI parents involved had not informed the child, there was no indication so far that secrecy affected the child negatively. A recent study comparing family relationships and child development between DI families who did and did not intend to disclose, revealed divergent findings. Disclosing parents viewed themselves as more competent. They had fewer severe arguments with their children and reported fewer conduct problems (Lycett *et al.*, 2004). Nachtigall *et al.* (1997) did not find such a difference in family functioning between disclosing and non-disclosing DI parents. However, a negative association was reported between the father's experienced infertility distress and the quality of his relationship with his child. What can we learn from all these findings? Obviously, there is no reason to believe that parental openness (and consequently their need for identifying donor information) produces better parent-child relationships as such. An alternative explanation is that donor choices are influenced by more general parental characteristics, such as coping strategies, overall well-being and potential parental skills. Such characteristics are believed to predict future family functioning and child outcome.

In conclusion, anticipating a DI practice where only identity-release donors will be available, what can we learn from this study? The distinct differences between AD and ID choosers suggest that not all recipients will fare well under the new legislation. For ID choosers, consisting of lesbian mothers and a pioneering group of more privileged

heterosexual parents, the new regulations fulfil their needs. AD choosers appear to be a more vulnerable group and adaptation to an open system is not self-evident. A compulsory choice for an identifiable donor does not change individual motives and might even lead to more secrecy and family isolation (Pennings, 1997). Since the child's well-being is strongly influenced by quality of the family relationships, DI parents' concerns and fears must be taken seriously.

First of all there is a need for professional counselling protocols. Pre-treatment counselling should focus on individual motives and cognitions rather than provide *a priori* advice. In this regard, helping DI families to cope more adequately with (sometimes internalized) social stigmatization might have an empowering effect. DI parents should also receive the opportunity to discuss DI matters with a professional after the birth of their children. Disclosure issues come to the fore in several stages of family development and different questions arise according to the child's age. Secondly, the development of public campaigns preventing further stigmatization of male infertility is another tool to influence prevailing values. Increased social tolerance could positively influence future parents' openness about DI. Finally, as it appears that attitudes about the role of a sperm donor within a family change quickly during this transition period, there is a need for continuing objective information. Large-scale follow-up studies, investigating DI parents' and children's own choices and concerns, should receive the highest priority.

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