# Telling the story: parents' scripts for donor offspring\*

### Anna Rumball and Vivienne Adair<sup>1</sup>

The School of Education, The University of Auckland, Auckland, New Zealand

<sup>1</sup>To whom correspondence should be addressed

This study documents experiences of parents who chose to disclose, and intended to disclose to their children, information about the donor involvement, and children's responses when they received this information. Of the 181 parents who responded, 30% (n = 54) gave their children information about their conception (34 families). Couples chose to tell when 'it just seemed right' or when they believed their children could understand their stories. The stories shared concerned the parents' inability to have children together, and the need for spermatozoa and specialist attention, and the families reading a book about donor insemination. There appeared to be an advantage in giving children this information at a young age, at which the information was processed in a factual, non-emotional way. Any questions asked by the children related to practical issues. These parents reported that it gave them opportunities gradually to introduce information as the children's understanding progressed. Of the parents who had not told (n = 127), 77% (n = 98) intended to disclose information in the future. This group gave their child's age and inability to understand as their main reasons for choosing to wait. Some 17% (n = 22) of parents who had not told chose not to disclose. There were no significant differences between the responses of mothers and fathers.

*Key words:* children/donor insemination/infertility/information/secrecy

## Introduction

Donor insemination, as a method of assisting conception for couples with a male factor infertility, is a treatment which has a history of 200 years (Hummel and Talbert, 1989). Only recently have legal and psychological issues relating to the treatment raised some questions, one of the most important being acknowledgement of the use of donor gametes. The legal position in the United Kingdom in 1977, for example, was that any child born as a result of donor insemination was illegitimate (Smart, 1987), and the couple had to apply to

adopt the child. Prevailing beliefs at this time were that such children should be told that they were adopted (Manuel *et al.*, 1980; Leeton and Blackwell, 1982; Milsom and Bergman, 1982; Rowland, 1985). However, the confidentiality of donor insemination treatment enabled the social parents to register the child's birth, recording the mother's husband as father. In the main, it was the position of inheritance which caused the legal professions in several countries to recommend that legislation for protection of the donor should be enacted. This led to a redefinition of the relationship between the child and the mother's husband (Warnock, 1984; Sverne, 1990; Robinson *et al.*, 1991).

The intended social parents were expected to register the child's birth, naming themselves as parents of the child of the marriage. Similar laws were enacted in the United States (Vetri, 1988), Sweden (Sverne, 1990) and in New Zealand (Status of Children Act, New Zealand, 1985). These legislative steps have not only provided protection for donors from claims to inheritance or paternity, but have also legitimized the relationship between the child and the parenting couple. However, the laws have not acknowledged any genetic inheritance involved. Neither have they ensured that children have the right to information concerning the details of their conception circumstances (Daniels and Taylor, 1993; Snowden, 1993).

There are differing views as to whether or not children should be given this information. Legislation in several countries ensures the secrecy of the donor-offspring relationship while making provision for non-identifying information (Medical Procedures Act, Victoria Australia, 1985; American Fertility Society, 1993) and in others ensures that children have access to information at maturity (Andrews, 1987; Daniels and Taylor, 1993; Daniels and Lalos, 1995). The United Nations Convention on the Rights of the Child (1989) states that we must 'undertake to respect the right of the child to preserve his or her identity, including nationality, name and family relations as recognized by law without unlawful interference' (Part 1, Article 8). Some countries already acknowledge this right for the child to have access to information (Infertility Treatment Act, 1995). For example, in Victoria, Australia, changes in January 1998 extend the conditions by which donor-conceived children are allowed access to identifying information about the donor without his consent being required (Blood, 1998). More recently, some clinics in the USA and the Netherlands have established a 'double track' policy for donor anonymity (Pennings, 1997). This policy allows the donors the choice between anonymity and identification, and also the recipients the choice between an anonymous or an identifiable donor.

However, there seems to be an increasing trend by many

<sup>\*</sup>Presented at the 15th Annual Scientific Meeting of the Fertility Society of Australia in conjunction with the Australian Gynaecological Endoscopy Society 11th Annual Scientific meeting, Queenstown, New Zealand, 9–14 September, 1996.

health professionals to recommend openness as the 'best practice' on this issue, and many parents are being encouraged to tell their children about their origins. Nevertheless, it has been suggested that the decision by couples not to disclose information about donor insemination protects both the couple and the child from negative reactions by society (Nachtigall *et al.*, 1997).

Couples are confronted, then, with the question of whether to tell children about their donor origins. Research has highlighted two fundamentally opposing views (Le Lannou et al., 1998). The first is that children generally have the right to access information regarding their conception and their genetic parentage. The opposing view is that anonymity protects the child and the family relationships. Shover et al. (1992) found that three-quarters of the participants evaluated for entry into a donor insemination programme believed that a child should not be told of the circumstances of their conception. Similar findings from other studies have been reported (Bolton et al., 1991; Owens et al., 1993; Klock et al., 1994). Interestingly, in the study reported by Bolton et al. (1991), all subjects were more in favour of anonymity for donor insemination than for egg donation. Donors, however, appear to be more agreeable to their identity being made available to a child when he or she reaches maturity than either the recipient men or recipient women (Purdie et al., 1992). Brewaeys et al. (1997) found that three-quarters of the parents they studied, whose children were conceived by donor insemination, intended not to disclose. Over half of these parents preferred an anonymous donor, and there were differing opinions between the father and mother regarding the issues of confidentiality and anonymity of the donor.

Golombok (Golombok, 1997) has suggested that pressure has been placed on parents to disclose information to their children about their donor origins. The opinion of social policy makers regarding the benefits of disclosure, however, appears to differ from that of many parents (Cook *et al.*, 1995). Klock (1997) suggested that mental health professionals should maintain a neutral position regarding disclosure and provide information on its pros and cons. Shenfield (Shenfield, 1997) believed that the parents' choice not to disclose their child's donor origins to them should be respected and that, if this information is not disclosed, one can enhance the social paternal role of the male (Shenfield, 1997; Shenfield and Steele, 1997). It is also believed that the decision not to disclose may enable the couple to protect the means of conception of their child (Shenfield and Steele, 1997).

Adair and Purdie (1996) suggested that, even when couples are urged to be open about the involvement of a donor, they may not take this decision (Adair and Purdie, 1996).

Golombok (1999) has reported that there is little research to suggest that, psychologically, children conceived by donor insemination are negatively affected (Golombok, 1999). However, it was suggested that, with non-disclosure, difficulties for the child may not be evident until he or she enters adolescence and begins the process of identity formation and exploration. It has been noted that some emotional and behavioural difficulties were documented in relation to adopted children as they entered adolescence (Maughan and Pickles,

1990). Le Lannou *et al.* (1998) also suggested that there may be detrimental effects if the child were to be told about their donor origins after 10–12 years of age (Le Lannou *et al.*, 1998). The origins of the child are very important, and the questions and information required become more salient at the identity formation stage at adolescence.

Recent studies have illustrated that children below the age of seven are unable fully to understand the concepts of biological inheritance (Solomon *et al.*, 1996). Piaget (1955) contended that a child's ability to learn was determined by the stage of cognitive development. During the pre-school years a child is said to be working in the pre-operational stage and grasps information more intuitively than on a logical or mental level. Although information can be incorporated into the memory, it takes some time for the words to acquire socialized meanings. Once a child is said to reach the concrete operational stage (7–12 years), he or she is more capable of logical thought processes and more reasoning.

Dudley and Neave (1997) have suggested that the information the parents share with their children about their donor conception should begin at the children's level of understanding (Dudley and Neave, 1997). At a young age, the children may not understand the stories and information the parents disclose, but over time they will gradually process the information and incorporate it into their understanding. This will be evident in the types of questions asked by the children, and their responses to the information. The stories will need to be repeated over time with the development of the children's understanding (Dudley and Neave, 1997). This indicates that telling children is not an isolated incident, but an ongoing conversation (Hajal and Rosenberg, 1991).

Dudley and Neave (1997) have also suggested that couples may fear telling their children about the use of donor conception because they have unresolved feelings about their infertility, and fears of rejection. Daniels (1997) also suggested that, while there is evidence that parents are anxious about subsequent rejection by their children, there is no evidence that they actually experience this rejection (Daniels, 1997).

Infertile men carry pain and humiliation about their infertility and inability to conceive a child (Daniels and Taylor, 1993). Many men may find it difficult to talk about the issues of their child's donor origins, especially for the first time. To deal with this issue when the children are young is an easier task because they are likely to ask questions only for factual information.

There is relatively little information regarding the experiences of children and their families as a consequence of disclosure (Nachtigall, 1993). Two small studies have documented the experiences of young adults who know of their conception circumstances (C.S.Geithner, unpublished results; Snowden, 1990). Reference has also been made as to the importance of consulting certain adoption literature. Within this literature, there are both considerable differences and important similarities between the two general situations of child adoption and donor insemination (Dudley and Neave, 1997). The differences should not be underestimated (Klock, 1997). Nevertheless, for many adoptees the knowledge about their genetic origins has assisted in the development of their own sense of identity (Hoopes, 1990). Daniels and Taylor

Table I. Reasons for husbands' non-participation in the questionnaire

Response categories (children have been told)		Response categories (children have not been told)	No. of males
Away on business Too busy to complete it Wife answered as he would	5 6 1	Private matter between husband and wife	11

(1993) included in the similarities between adoption and donor insemination the anguish of infertility and the various, sometimes conflicting, views of parties involved (Daniels and Taylor, 1993). The same study addressed the common traditional views of not considering the aspect of children's rights to know their origins. This information gained from adoptees and their families may be of value to those involved in donor insemination. Melina (1989) contended that adopted children have the right to the knowledge of their origins and the circumstances of their existence in a family, including those of the adoption process, and argued that children conceived by donor insemination have the same rights (Melina, 1989).

The aim of the present study was to investigate the experiences of disclosing and not disclosing for parents whose children were conceived by donor insemination, together with the children's responses following such a disclosure.

#### Materials and methods

#### Study participants

The population consisted of couples who had children from a donor insemination programme at Fertility Associates in Auckland. This is a private clinic which performs approximately 30–40% of the donor inseminations in New Zealand. Counselling services were an integral part of the programme, with sessions offered to each couple who participated. Eligibility for inclusion in the study was determined by having a child conceived by donor insemination who was aged one year or more.

#### **Procedures**

Those couples who had been through the programme since October 1993 had been given the opportunity to sign a consent form to agree to being contacted by the staff at the clinic for future research involvement. These couples were sent a letter from the clinic directors asking them to participate, and a questionnaire from the University. The remainder of the couples who had been through the programme before October 1993 were contacted by the clinic staff who obtained verbal consent to be contacted by the researchers. There were eight couples who denied permission to be contacted by the clinic in the future. The 154 couples were instructed to complete their questionnaires independently. Of the 154 couples (308 people) who were sent questionnaires, 78 couples, 23 individual females and two individual males completed and returned the questionnaires (n = 181). For the 23 couples where the male did not respond to the questionnaire, the reasons ranged from being 'too busy' to believing that 'their child's donor origins was a private matter' (Table I).

Overall, this produced a participation rate of 66% for females and 52% for males. This yielded an overall response rate of 59%. Among the 181 respondents, 150 people indicated that they were willing to be further contacted for a telephone interview if required. Telephone interviews were conducted with the first 20 people listed alphabetically

who had consented to being contacted, alternating between mothers and fathers.

#### Details of participants

The mean age of the infertile couples was 38 years, with a range of 25–58 years. Women (mean age 26.5 years) were younger than men (mean age 40 years), and 25% of women were aged over 40 years, compared with 50% of men.

Some 40% of the couples had one child by donor insemination, 50% had two, and 5% had three. There were 70 other children in these families who were step-children, adopted, or were related biologically to both parents through intracytoplasmic sperm injection (ICSI). The majority of the additional children (92%) were over the age of 16.

#### Measures

A questionnaire was developed by the researchers in consultation with the staff at the clinic. This included 32 questions, both multichoice and open-ended, with further space for comments. Three questions required an answer on a Likert-type scale. The questionnaire consisted of four components: sociodemographic information; the intentions of telling children; the responses to this; and donor information. Information collected from the fourth section, relating to donor information, will be reported in a subsequent article.

Sociodemographics: Respondents were asked their age, and to disclose the number of children they had conceived by donor insemination, the ages and sex of these children, and their relationship to each other. They were asked the ages and sex of other children they had, and the relationship between these children.

Experiences of telling children: A series of seven questions asked for the experiences of telling children about their donor conception. Two questions determined which of the respondents had told their children, and the reasons why they had or had not told. The remaining five items asked if parents told separately or together, how often the story was given and under what circumstances, which children in the family had been told, at what ages, and why at that particular time. Finally, parents were asked to describe in detail the stories they had told their children. This detailing was in open-ended format.

Responses of children and parents: Two questions asked about the children's responses to hearing about their donor conception and what (if any) questions were asked. Four questions asked respondents about any effects on themselves of telling the children. The first of these was how they felt once they had told, the second was if they would change anything if they could begin again, and the third asked them to indicate from six statements what help or information they would have liked or would have changed. The final question in this section asked whether telling children had brought up any issues for the parents. Each of the questions gave opportunity for explanation of answers.

In addition to frequency tabulations of responses, chi-square  $(\chi^2)$  analyses were performed to compare responses from mothers and fathers. There were no significant differences. All data were analysed using the SPSS computer package.

## Results

It should be noted that in many of the sections in the questionnaire not everyone answered every question so that numbers may not be consistent across questions. There were also opportunities in some questions for parents to give several responses to one question. While there was a slightly higher return rate of questionnaires for this study by the mothers, this did not reach statistical significance.

Table II. Reasons for telling children about their conception

Response categories	Percentage of parents	n
Want to be open and honest	48	26
Important that the children know	28	15
Want to introduce their story gradually	20	11
The children are still very young	20	11
Want this to be a normal part of their lives	19	10
The children know they are special	7	4
Advised to tell early by counsellors	6	3
Feel comfortable	6	3
A second pregnancy	2	1

#### Parents who told their children

Of those people who participated in this study, 30% (n = 54; 21 couples and 12 individual female respondents) had given their children information about their donor conception. For these parents, the reasons for making this decision included wanting to be open and honest and because they felt that it was important that the children knew about their conception (Table II).

Of the 54 parents who had told their children about their conception, 49 responded to the question asking 'which children in their family they had told'. Nineteen parents (39%) had told just their oldest child, 19 (39%) had told all their children, and 11 (22%) had only one child. The majority (62%; n = 33) of the parents reported that the first time their children were told the story about their conception the partners were not present. When parents were asked 'how often they talk with their children about their conception', 59% (n = 32) of the parents reported that they would 'sometimes' talk to their children about 'their story' and 17% (n = 9) said they would 'often' talk about it with the children. In response to the question about 'who would initiate discussion', 57% (n = 31) of the parents' responded that they themselves would initiate discussion about their children's 'stories' and 48% (n = 26) reported that discussion was in response to children's own questions about their conception. For example, 'he asked how babies were made'.

When deciding 'when the time was right' to introduce the stories, 33% (n=18) of the parents said that the time 'just felt right for them'. In addition, 24% (n=13) felt that they wanted their children to grow up knowing about their conception, and 22% (n=12) responded that they felt their children were 'ready' to comprehend the information.

In response to the question about 'what it was like for parents when they first began talking with their children', 43% (n=23) would have liked to know what others had done when they had told their children, and 28% (n=15) would have liked to talk to someone first about what to say. When asked to explain why they said this, 26% (n=14) said that the husband felt uncomfortable and 20% (n=11) were unsure where to begin and felt that they did not have enough help. The remainder of the parents gave no answer to this question. A small number of parents (n=9;17%) felt that telling their children had brought up some issues for them. When asked to explain these issues, 15% (n=8) reported a concern about

Table III. Themes of the stories told to children about their conception

Response categories	Percentage of parents	n	
Parents wanting a baby and not being able to have one	41	22	
Needing sperm or seeds from another man to make a baby	41	22	
Reading a book provided by the clinic about donor insemination	33	18	
Medical element – taken to the clinic, special doctors	33	18	
They were special/miracle babies	26	14	
Parents were so happy about having the baby	17	9	
There was a lot of special organizing and travelling involved	11	6	
Explanation about biological and social parents	7	4	

Table IV. Stories told to children about their conception

- 'Mummy and Daddy wanted a family so much that they had you with the help of a special doctor called Freddie'
- 'You need to have an egg from a Mummy and a seed from a Daddy. Daddy's seeds weren't going to make a baby so we went to get some seeds from a nice man who had lots. A doctor put the egg and the seeds together and a baby grew in Mummy's tummy. Now Mummy and Daddy have a beautiful baby'
- 'Mum and Dad had been trying to have a family of their own for a long time.

  After lots of tests they found out they couldn't have children of their own.

  We went to the clinic and the doctor helped us have you'
- 'We were very sad because we couldn't have children on our own. A kind man gave us some sperm to help make a baby'
- 'You are a very special baby and we waited a long time to have you'
- 'Mummy and Daddy were very sad because we couldn't have a baby. We went to a doctor who helped us and we had a very special baby and that baby is von'

the impact on the child and 11% (n = 6) worried that they had done the right thing in telling.

When parents were asked 'if they would change anything if they had to begin telling the story again', 89% (n=48) replied that they would not. There was no response from two people. The remaining four gave idiosyncratic reasons for wanting to change, all with an emotional theme. For example, one mother had told the child that he had one mummy and two daddies, and wished that she had not because he 'flatly denied it and said it wasn't true'. The next time she brings the subject up, this mother intends to talk about a donor rather than a second father. When parents were asked to explain why they would not change anything, 14 said they were pleased with the way they had started, and eight saw telling as no big deal and felt that the story was a normal part of the family's lives.

For those parents who had shared information with their children about being conceived by donor insemination, the most common stories were about parents wanting a baby and not being able to have one together, and about needing sperm or seeds from another man to help make a baby. Many parents read to their children a book provided by the clinic about donor insemination. The themes of parents' stories are summarized in Table III.

For those children under the age of four, the parents initially introduced information which was very simple and factual. Examples of parents' stories are included in Table IV.

Table V. Age distribution of those children who have been told and those children who have not been told

Age of child (years)	No. of children told	No. of children not told
0	9	6
1	5	9
2	11	30
3	9	19
4	5	5
5	3	17
6	3	8
7	1	1
8	_	1
Total	46	96

### Ages at which children were told

Of the 46 children who had been told about their donor conception, 34 (74%) were aged three or younger when they first heard information from their parents, 14 (30%) were aged less than two, and nine (20%) were talked to from birth. The age distribution of those children who have been told, and those who were not told (n = 96) up to the age of 8 years, are listed in Table V.

#### Responses of children and parents

#### **Parents**

The majority (57%) of those parents who had told their children a story about their conception reported feeling good having done so. 'I feel good; it will be easier to discuss their conception as they get older because it's already out in the open'. Others (20%) felt apprehensive about what may arise in the future now the child knew about his or her conception, for example, '(I feel) nervous that the telling is only beginning'. Some (13%) saw telling their children as 'no big deal', 'It's not an issue'. There was no significant difference between the feelings of the females and the males whose children had been told about their conception ( $\chi^2 = 5.1$ , d.f. (4), P < 0.28). When parents were asked for an explanation of their feelings, 57% indicated that the main consideration was the importance of having the issue out in the open.

#### Children

Parents reported that their children's responses to these stories were largely of interest. For example, 'She is keen to hear it (the story) again and again and corrects me if I tell it wrong'; or no real response, '(His response was) nothing at all'. There was no significant relationship between those children who responded with interest and those who did not respond with interest, and the age of the children. A summary of the children's responses is given in Table VI.

The questions that the children asked about their story mostly concerned the donor (17%): 'Does he have a family?'; 'Why can't I know his name?'. They also asked for a repeat of the story (11%), 'Tell me the story of when I was born from the beginning', or medical questions (9%), for example, 'Why doesn't Daddy have any sperm?'.

#### Parents who had not told their children

There were 127 parents (57 couples, two individual male and 11 individual female respondents) who had not told their

Table VI. Children's responses to their stories

Response categories	Percentage of parents	n	
Interest in the story	41	22	
No real response	24	13	
Questions	15	8	
Understood the story	7	4	
Disinterest	7	4	
Disbelief	4	2	

children about their conception (70%). Of these parents, 98 (77%) do intend to tell at some stage and 22 (17%) intend never to tell. There was no significant difference between mothers' and fathers' intentions to tell. If parents had not told their child that he or she was conceived by donor insemination, the main reason given for this was that they believed the child was 'not old enough to understand' (72%; n = 92). Of those parents who do intend to tell their children about their conception (n = 98), when asked when they intended to tell, a large proportion replied that it would be when the children were old enough to understand (47%; n = 46). Moreover, 24% (n = 24) of parents were unsure when to tell their children, and 16% (n = 16) said they would tell when their children asked questions, for example when they became interested and asked questions about where babies come from. These children currently range in age from 1 to 8 years, with 33% (n = 32) aged four or more. The age distribution of those children who have been told and those who have not is listed in Table V.

Of the 22 who did not intend to tell, 55% (n = 12) gave as their reasons that the whole issue was a private matter between husband and wife, and no one else needed to know as nothing would be gained by telling them. Other reasons given were that it was irrelevant to tell the children about their donor conception (36%; n = 8).

## Telephone interview

The telephone interviews were designed to elaborate on the questionnaire responses and acquire more detail of the information shared with the children. All the respondents felt that they had answered the questionnaire as fully as they were able to and no information additional to the questionnaire was obtained. However, all people interviewed reported that the telephone conversation was therapeutic and they all wanted information on the outcome of the study. Some 90% of the parents asked questions about other parents' experiences of telling their children, what information they shared with them, and at what age they had been told.

Of the 181 people participating in the study, 170 (94%) accepted the counselling offered by the resident counsellors at the clinic upon entering the donor insemination programme.

#### Discussion

This sample was restricted to couples whose children were assumed to be at least one year old. The reason for this restriction was that the researchers believed that couples were unlikely to talk to their children about their donor conception

before the age of one. Nevertheless, it was interesting to note that several parents had begun speaking with their children about 'their story' from birth (Table V).

These parents wished to be open and honest (as they saw it) with their children, and felt that it was important they received information about their donor conception and regarded it as a normal part of their lives. Moreover, disclosure to the children while they were still young was perceived to be an advantage, as the children cognitively processed the information which they understood factually. The children's responses illustrated this. According to the parents, when children received information about their stories, they largely responded with practical questions about the donor and his family, or gave no real response. Research has shown that children absorb only that information which is relevant to their time of life (Piaget, 1955). The implication of this is that young children may be introduced to the story at an appropriate level and, as they grow up, the story grows with them. It is repeated and described in more detail as they are able to comprehend more. In this way, the parents believe their children grow up knowing of their donor circumstances, and perceive it to be 'no big deal'. This contrasts with disclosure made when the child is older. In such cases the impact of the total information on the child's now well-developed understanding may be potentially more damaging (Le Lannou et al., 1998). The experience in this study was that a gradual disclosure, which approximated to the various levels of understanding, impacted little on the children at their differing ages. While they still asked a few questions, the telling process was largely seen by them as a non-event. This may not be so if disclosure is withheld until the child is older.

Many parents who had disclosed information to their child were aware that the information would need to be revisited. Greater detail would be expected from children as they grew, therefore there would be an ongoing need to broach the subject and meet this need. This indicates that disclosure does not end, but remains as an ongoing element with the parent(s)/ child relationship (Hajal and Rosenberg, 1991). Dudley and Neave (1997) also concluded that parent/child discussions on the subject should continue over time and in a manner appropriate to the child's level of understanding (Dudley and Neave, 1997). Some parents in the study had already begun this re-telling process. As one mother reported, 'I expect we will need to revisit this when the subject of babies comes up, but I hope that it's a gradual realization for our child as her knowledge of human biology grows'. The parents did not always initiate the re-telling, but regularly responded to their child's questions. Moreover, such interest from the children provided the opportunities for parents to gradually introduce more detail. Some parents in the study speculated that they would have found a later disclosure more difficult. Early disclosure gave them an opportunity to become more skilled in their disclosure technique.

A common method of disclosure began with sharing information with the child in a simple, story-like form. These included stories of mothers and fathers together being unable to have children and needing a third party to help. The helper gives something which is missing, but which is important. With the

helper, Mummy and Daddy have their children. Alongside such stories, couples have found the book, *My Story* (Cooke, 1991) a helpful way to introduce the story to their children. This book was written to assist parents with the telling process and is targeted at children aged 18 months and older. A few couples have proceeded to produce their child's own book about the family's 'special conception'. Another book has recently been introduced to couples by the counsellors at the clinic. *Let Me Explain: A Book About DI* (Schnitter, 1995) was aimed at children between the ages of four and six years. Positive feedback comments suggest that the book, *My Story*, is useful. It is important that both books are recommended by clinics and made readily available to couples going through donor insemination programmes.

The study also revealed a need by many parents to be informed of methods of disclosure used by other couples. Such factors included ways to broach the subject, specific examples of terms and language used by other families at the child's various stages of development and the actual dynamics of a disclosure discussion. Furthermore, parents reported a need to talk about this with others, and it was noted that with whom was less important than that the support was actually provided. The study concluded that such support could be provided by a variety of means, including earlier participants in the donor insemination programme, parent support groups, peer support and counsellors at the clinic. Interestingly, in several countries (Australia, Canada, New Zealand, UK, USA) there has recently been a growth in the number of donor insemination support groups for parents to make contact, share information and provide support (Daniels, 1997).

The clinic offers counselling to all couples, and 94% of the study population took advantage of the opportunity to attend. At these sessions, counsellors encouraged couples to disclose to children their conception circumstances, and to do so at a young age. Le Lannou et al. (1998) reported that couples need to be fully informed about the telling process, and if they decide to disclose to their child their donor conception, then this should occur as soon as possible (Le Lannou et al., 1998). Nevertheless, within the study, the majority of parents had not yet given their children information about their donor origins. However, the majority of such parents reported that they intended to tell their children of their donor origins. It has been proposed that if parents are considering disclosing the information to their children, they become apprehensive and have difficulty as to actually when and how to do so (Cook et al., 1995; Daniels, 1997). The parents in this study who had not yet proceeded with the telling process had concerns as to the appropriate age for disclosure and also whether the child's comprehension or non-comprehension of the full story had relevance. It has been suggested that these parents feel that explanations are futile until their children are old enough to understand the issue of reproduction (Cook et al., 1995).

Future research needs to focus on those children who have been told of their donor conception, giving them the opportunity to describe their experiences of finding out about their story. It would be especially useful to speak with older children to understand their perspectives and to encourage them to elaborate on all the issues which were important for them.

In summary, this study shows that the majority of parents have not spoken to their children of their donor conception. The difficulties appear to be uncertainty regarding the best age, and the best method of explanation to the children. Importantly, the issue of the age at which disclosure should be made to a child has highlighted the need for couples to understand some of the benefits for both parents and children, firstly in disclosing the circumstances of their conception and, secondly, the specific benefits of speaking with them at a young age. Parents felt that they needed guidance and support as to what and when to tell. They also needed an understanding of any likely consequences of disclosure, both to their children and to themselves. While there are some concerns about future questioning by children who have been told, and also any consequences of disclosing to the children, the majority of parents felt relieved that they had shared this information with their children.

It has been suggested that the trend for openness will continue (Daniels *et al.*, 1995). Furthermore, the study concludes that it is beneficial for couples upon entering a donor insemination programme to be aware of all relevant issues which have been identified by earlier couples. Clinics should emphasize the importance of counselling, and provide other ongoing support for parents following the birth of the child.

## Acknowledgements

Thanks are given to Fertility Associates, Auckland, New Zealand for funding a Summer Studentship to A.R. which made this research possible.

#### References

- Adair, V.A. and Purdie, A. (1996) Donor insemination programmes with personal donors: issues of secrecy. *Hum. Reprod.*, **11**, 2258–2563.
- American Fertility Society (1993) Guidelines for therapeutic donor insemination: sperm. Fertil. Steril., **59**, 1S–9S.
- Andrews, L.B. (1987) Ethical and legal aspects in vitro fertilisation and artificial insemination by donor. *Urol. Clin. North Am.*, 14, 633–642.
- Blood, J. (1998) The Impact of Male Infertility and their Relationships: A Critical Review of the Literature. A thesis submitted in partial fulfilment of the requirements for the degree of Masters of Women's Health. University of Melbourne.
- Bolton, V., Golombok, S., Bish, A. and Rust, J. (1991) A comparative study of attitudes towards donor insemination and egg donation recipients, potential donors and public. *J. Psychosom. Obstet. Gynaecol.*, **12**, 217–228.
- Brewaeys, A., Golombok, S., Naaktgeboven, N. et al. (1997) Donor insemination: Dutch parents' opinions about confidentiality, the donor anonymity and the emotional adjustment of their children. Hum. Reprod., 12, 1591–1597.
- Cooke, I. (1991) My Story. Jessop Hospital for Women, England.
- Cook, R., Golombok, S., Bish, A. and Murray, C. (1995) Disclosure of donor insemination: parental attitudes. Am. J. Orthopsychiatr., 65, 540–559.
- Daniels, K. (1997) Information sharing in gamete donation. In Lorbach, C. (ed.), *Let the Offspring Speak: Discussions on Donor Conception*. Donor Conception Support Group of Australia Inc., New South Wales, Australia, pp. 95–107.
- Daniels, K. and Lalos, O. (1995) The Swedish insemination act and the availability of donors. *Hum. Reprod.*, 10, 1871–1874.
- Daniels, K. and Taylor, K. (1993) Secrecy and openness in donor insemination. *Politics and the Life Sciences*, **12**, 155–170.
- Daniels, K.R., Lewis, G.M. and Gillett, W. (1995) Telling donor insemination offspring about their conception: the nature of couples decision-making. *Soc. Sci. Med.*, **40**, 1213–1220.
- Dudley, M. and Neave, G. (1997) Issues for families and children where conception was achieved using donor gametes. In Lorbach, C. (ed.), Let

- the Offspring Speak: Discussions on Donor Conception. Donor Conception Support Group of Australia, New South Wales, Australia, pp. 125–126.
- Golombok, S. (1997) Parenting and secrecy issues related to children of assisted reproduction. J. Assist. Reprod. Genet., 14, 375–378.
- Golombok, S. (1999) New families, old values: considerations regarding the welfare of the child. Hum. Reprod., 13, 2342–2347.
- Hajal, F. and Rosenberg, E.B. (1991) The family life cycle in adoptive families. *Am. J. Orthopsychiatr.*, **61**, 78–85.
- Hoopes, J.L. (1990) Adoption and identity formation. In Brodzinsky, D.M. and Schechter, M.D. (eds), *The Psychology of Adoption*. Oxford University Press, Oxford, pp. 144–166.
- Hummel, W.P. and Talbert, L.M. (1989) Current management of a donor insemination programme. Fertil. Steril., 51, 919–930.
- Infertility Treatment Act (1995)
- Klock, S.C. (1997) The controversy surrounding privacy or disclosure among donor gamete recipients. J. Assist. Reprod. Genet., 14, 378–380.
- Klock, S.C., Jacob, M.C. and Maier, D. (1994) A prospective study of donor insemination recipients: secrecy, privacy and disclosure. Fertil. Steril., 62, 477–484
- Leeton, J. and Blackwell, J. (1982) A preliminary psychosocial follow-up of parents and their children conceived by artificial insemination by donor (AID). Clin. Reprod. Fertil., 1, 307–310.
- Le Lannou, D., Thepot, F. and Jouannet, P. (1998) Multicentre approaches to donor insemination in the French CECOS Federation: nationwide evaluation, donor matching, screening for genetic diseases and consanguinity. *Hum. Reprod.*, 13, 35–49.
- Manuel, C., Chevret, M. and Czyba, J.C. (1980) Handling of secrecy by AID couples. In David, G. and Price, W. (eds), Human Artificial Insemination and Semen Preservation. Plenum Press, New York, pp. 419–429.
- Maughan, B. and Pickles, A. (1990) Adopted and illegitimate children growing up. In Robons, L. and Rutter, M. (eds), *Straight and Devious Pathways from Childhood to Adulthood*. Cambridge University Press, Cambridge.
- Medical Procedures Act, Victoria Australia (1985)
- Melina, L. (1989) Making Sense of Adoption. HarperCollins, New York.
- Milsom, I. and Bergman, P. (1982) A study of parental attitudes after donor insemination. *Acta Obstet. Gynaecol. Scand.*, **61**, 125–128.
- Nachtigall, R.D. (1993) Secrecy: an unresolved issue in donor insemination. *Am. J. Obstet. Gynecol.*, **169**, 1846–1849.
- Nachtigall, R.D., Tschann, J.M. and Szkupinski, S. (1997) Stigma, disclosure, and family functioning among parents of children conceived through donor insemination. *Fertil. Steril.*, 68, 83–89.
- Owens, D.J., Edelman, R.E. and Humphrey, M.E. (1993) Male infertility and donor insemination: couples' decisions, reactions and counselling needs. *Hum. Reprod.*, **8**, 880–885.
- Pennings, G. (1997) The 'double track' policy for donor anonymity. *Hum. Reprod.*, **12**, 2839–2844.
- Piaget, J. (1955) *The Language and Thought of the Child*. The World Publishing Company, Cleveland, Ohio.
- Purdie, A., Peek, J.C., Irwin, R. et al. (1992) Identifiable semen donors: attitudes of donors and recipient couples. N. Z. Med. J., 125, 27–28.
- Robinson, J.N., Forman, R.G., Clark, A.M. et al. (1991) Attitudes of donors and recipients to gamete donation. Hum. Reprod., 6, 307–309.
- Rowland, R. (1985) The social and psychological consequences of secrecy in artificial insemination by donor programmes. Soc. Sci. Med., 21, 391–396.
- Schnitter, J.J. (1995) Let Me Explain: A Book About DI. Prespective Press,
- Shenfield, F. (1997) Privacy versus disclosure in gamete donation: a clash of interest, of duties or an exercise in responsibility. J. Assist. Reprod. Genet., 14, 371–373.
- Shenfield, F. and Steele, S.J. (1997) What are the effects of anonymity and secrecy on the welfare of the child in gamete donation? *Hum. Reprod.*, **12**, 392–395
- Shover, L.R., Collins, R.L. and Richards, L.S. (1992) Psychological aspects of donor insemination: evaluation and follow-up of recipient couples. *Fertil. Steril.*, 57, 583–590.
- Smart, C. (1987) There is of course the distinction dictated by nature: law and the problem of paternity. In Stanworth, M. (ed.), *Reproductive Technologies: Gender, Motherhood and Medicine*. Polity Press, UK.
- Snowden, R. (1990) The family and artificial reproduction. In Broham, X. *et al.* (eds), *Philosophical Ethics in Reproductive Medicine*. Manchester University Press, Manchester, pp. 70–185.
- Snowden, R. (1993) Sharing information about DI in the UK. Politics and the Life Sciences, 12, 194–195.

- Solomon, G.E., Johnson, S.C., Zaitchik, X. and Carey, S. (1996) Like father, like son: young children's understanding of how and why offspring resemble their parents. *Child Dev.*, **67**, 151–171.
- Status of Children Amendment Act, New Zealand, 1987; No. 185.
- Sverne, T. (1990) Bio-technological developments and the law. In *Changing Family Patterns: Bio-engineering, Demographic Factors, Family Policies, Values.* Basil Blackwell, Ltd. for UNESCO, **126**, 465–472.
- The United Nations Convention on the Rights of the Child (1989) Adopted by the General Assembly of the United Nations on 20th November, 1989.
- Vetri, D. (1988) Reproductive technologies and the United States Law. *International and Comparative Law Quarterly*, **37**, 505–534.
- Warnock, M. (1984) Report of the Committee of Inquiry into Human Fertilisation and Embryology. Basil Blackwell, Oxford.

Received on August 3, 1998; accepted on January 26, 1999