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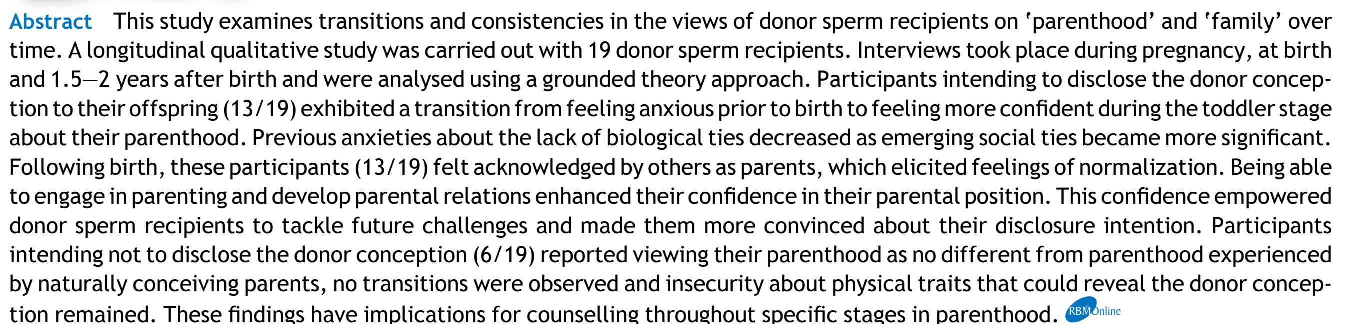
'Of course he's our child': transitions in social parenthood in donor sperm recipient families

A Indeked [a,*], T D'Hooghe [b], KR Daniels [c], K Dierickx [a], P Rober [d]

[a] *Centre for Biomedical Ethics and Law, KU Leuven, Leuven, Belgium;* [b] *Leuven University Fertility Centre, University Hospitals Leuven, Leuven, Belgium;* [c] *School of Social and Political Sciences, University of Canterbury, Christchurch, New Zealand;* [d] *Institute for Family and Sexuality Studies, KU Leuven, Leuven, Belgium*
[*] Corresponding author. *E-mail address:* Astrid.indekeu@med.kuleuven.be (A Indekeu).

Astrid Indekeu has Masters in Clinical Psychology and in Family and Sexuality Sciences (2008, KU Leuven Belgium). For 10 years she specialized in the field of medical psychology. She is currently working on a PhD thesis on psychological aspects of third-party reproduction. A central focus of her research is the process of selective disclosure of the donor conception to the offspring in the context of genetic and social parenthood. The research is a multidisciplinary project and involves collaboration of the Leuven University Fertility Centre, the Institute of Family and Sexuality Sciences and the Centre for Biomedical Ethics and Law.



Abstract This study examines transitions and consistencies in the views of donor sperm recipients on 'parenthood' and 'family' over time. A longitudinal qualitative study was carried out with 19 donor sperm recipients. Interviews took place during pregnancy, at birth and 1.5–2 years after birth and were analysed using a grounded theory approach. Participants intending to disclose the donor conception to their offspring (13/19) exhibited a transition from feeling anxious prior to birth to feeling more confident during the toddler stage about their parenthood. Previous anxieties about the lack of biological ties decreased as emerging social ties became more significant. Following birth, these participants (13/19) felt acknowledged by others as parents, which elicited feelings of normalization. Being able to engage in parenting and develop parental relations enhanced their confidence in their parental position. This confidence empowered donor sperm recipients to tackle future challenges and made them more convinced about their disclosure intention. Participants intending not to disclose the donor conception (6/19) reported viewing their parenthood as no different from parenthood experienced by naturally conceiving parents, no transitions were observed and insecurity about physical traits that could reveal the donor conception remained. These findings have implications for counselling throughout specific stages in parenthood.

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KEYWORDS: gamete donation, parenthood, sperm donation, transition

Introduction

Although social and genetic parenthood are 'core' aspects of third-party reproduction, until now little research has focused on how donor-conceiving couples manage challenges related to social and genetic parenthood and how their processing of these issues relates to whether they choose to share information about the donor conception with others and the offspring.

Reproduction technologies by means of a donor seem to have arguably done more than anything else to challenge the traditional understanding of family and kinship (Blank, 1990; Finkler, 2001). With such technologies, concepts of

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paternity, maternity and siblingship take on new meanings. Despite increasing societal acceptance of diversity in family compositions (e.g. single-parent households, blended, adoptive and same-sex families) where families may be a group established more on the basis of choice than on the basis of biogenetic ties (Finkler, 2001), anthropologists and psychologists point out that family ties based on biogenetic connections continue to be more highly valued cross-culturally than those based on non-biogenetic social ties (Edwards et al., 1999; Finkler, 2001; Strathern, 1992a,b). What makes a family in post-modern society has shifted, both theoretically and at the individual level, but within the broader social culture the ethos is still largely on the man, the woman and their biological offspring (van den Akker, 2001). Procreating a genetically related child is considered a basic human drive (Halman et al., 1992; Isaksson et al., 2011; Purewal and van den Akker, 2007; Skoog Svanberg et al., 2003) and a socialized drive (van den Akker, 2001). In terms of Belgium, the Belgian Advisory Committee of Bio-Ethics (2004) has stated that 'in our society, the opinion that the biological parent is the ''real'' parent is still too present, and this would be even more explicit for the role of the man than the woman'. Subsequently, building a family outside of these parameters is therefore deemed 'alternative' (van den Akker, 2001) and runs the risk of being stigmatized (Thorn, 2006). Yet, it should be noted that knowledge regarding public understanding of and specific attitudes towards gamete donation is still very limited (Hudson et al., 2009). Moreover, Finkler (2001) has pointed out that the medicalization of family and kinship through advances in contemporary biomedicine and genetics, along with the hegemony of the genes, adds to the challenges faced by donor sperm recipients. Recipients will also be challenged to cope with the importance of genes in genetic and non-genetic kinship connectedness for donor-conceived offspring (Blyth, 2012; Jadva et al., 2010). In such a cultural context, couples who rely on donor insemination are challenged to review and possibly revise their own views on the significance of genetic and social connectedness and what constitutes a 'family' and 'parenthood' in the absence of 'full' genetic connections (Grace et al., 2008; Grace and Daniels, 2007; Hargreaves, 2006; Kirkman, 2004). They manage these challenges through a discourse about physical resemblance and by re-examining the nature/culture dichotomy and either blurring the boundaries between them or privileging social ties and nurture over nature (Becker et al., 2005; Grace et al., 2008; Grace and Daniels, 2007; Hargreaves, 2006; Kirkman, 2004). However, considering the incongruence between the real and the 'ideal' family, as defined by society, research has demonstrated unease or cognitive dissonance among people opting for alternative reproductive choices and disclosing the reproductive choice to others (van den Akker, 2001). The experience or fear of stigmatization in donor sperm recipient couples has been shown to decrease the likelihood of disclosure (Daniels et al., 2007; Nachtigall et al., 1997). In this context, research on how donor sperm recipients give meaning to the concepts of 'family' and 'parenthood' not only adds valuable knowledge to understanding recipients' experiences of and approaches to reproduction by means of a sperm donor, but it might also provide insight on how the disclosure process concerning the use of a donor is managed.

It has been suggested that the impact of the offspring's origin lessens over time as social bonds are formed (Hargreaves, 2006). This could be especially relevant during the life stages of pregnancy and birth, as this initial transition to parenthood arguably brings about more profound changes than any other developmental stage of the family life cycle. The process of giving birth has been described as 'transformative' by oocyte recipient mothers (Stuart-Smith et al., 2012): having a real baby, as opposed to a desired baby, gave rise to a marked shift in the mothers' perspectives. Moreover, the transition to the parenthood stage has important implications for parents, the child–parent relationship and the child's development (Barclay et al., 1996; Deave and Johnson, 2008). Despite the fact that researchers (Blyth et al., 2010; Daniels et al., 1995, 2011; Klock and Greenfeld, 2004; MacCallum and Golombok, 2007; Salter-Ling et al., 2001; Söderström-Anttila et al., 2010; Stuart-Smith et al., 2012) often suggest that the way donor sperm recipients cope with their donor conception might change over time, most studies in the field of donor gamete fertility treatments are cross-sectional, retrospective explorations of one point in time (Indekeu et al., 2013; Stuart-Smith et al., 2012). In order to reliably record transitions over time, there is a pressing need to conduct long-term prospective studies (Indekeu et al., 2013).

The aim of this study is to provide insight into how donor sperm recipients construct, negotiate and experience meanings of 'parenthood' and 'family' given their 'alternative' context and how their meanings might evolve (or not) over three different stages in the family life cycle (pregnancy, birth and toddler stage). These findings have implications for counselling during these specific stages in parenthood.

Materials and methods

Participants

Heterosexual couples who relied on sperm donation to achieve a pregnancy were recruited through the Leuven University Fertility Centre (LUFC) and through advertisement in a women's magazine (*Libelle*). Participants were recruited regardless of their disclosure stance. Couples were contacted by the first author (AI) after they had given consent to the midwife of LUFC to be contacted or after they had responded to the advertisement. Information about the study was given orally and in written form during home visits. This made it possible to address both partners equally and allowed the eligible candidates to become familiar with the researcher. No financial compensation was given for participation. This study was approved by the Commission for Medical Ethics of the University Hospital of Leuven (reference no. B32220108778, approved 17 May 2010). Informed consents were signed prior to participation. Interviews took place between July 2010 and September 2012. For information concerning the Belgian legal context on third-party reproduction, readers are referred to Indekeu et al. (2012).

Out of 14 eligible couples who were approached through the LUFC, seven agreed to participate (one without her husband) and seven declined. Therefore, a response rate of 50% resulted from LUFC recruitment, a figure consistent with

that of other studies (Indekeu et al., 2013). Reasons to decline included the nature of the topic being 'too sensitive to talk about' ($n = 6$) and participants' desire 'to enjoy the pregnancy without being reminded of the mode of conception' ($n = 2$). Three additional couples participated after reading the advertisement. A total of 19 parents (representing nine couples and one woman who participated alone) were included in the study. The participants' details are presented in **Table 1**. The interviewer (AI) was introduced as a researcher with professional expertise in medical psychology and sexology, in order to assure participants of the researcher's familiarity with the topic. Participants often mentioned spontaneously that this information helped them to discuss the topic.

Data collection

Data were collected through home interviews, based on the belief that eligible candidates would feel more at ease at home and therefore invest more time into the discussion of these topics. Interviews were scheduled during evening and weekend hours to maximize participation. Parents were seen: (i) during the last trimester of pregnancy (T1); (ii) 3 months after birth (T2); and (iii) 1.5–2 years after birth (T3).

At each interview time, both joint couple and individual interviews of each partner took place. Couple interviews made it possible to capture parenthood's often 'shared construction of reality' (Hargreaves, 2006). During joint interviews, partners can jog each other's memory, control each other's honesty and support each other in discussing infertility from both the male and the female perspectives, all of which helps to enhance the reliability and validity of the data (Hargreaves, 2006). Interviewing couples was also useful in the recruitment process, because typically men are reluctant to participate in research involving discussions about the sensitive topic of male infertility (Hargreaves, 2006). On the other hand, each parent has individual thoughts and feelings that contribute to 'the shared construction of reality'. Therefore, individual interviews took place the day after each couple interview. Couple interviews were video-recorded, whereas individual interviews were audio-recorded. The individual interview was prompted by video excerpts from the couple interview, which were selected by the researcher based on; 'verbal expressions needing clarification', 'clarification about facial expressions' and/or 'reaction to partner's contribution'. The videos served to support the participants' memory. One couple declined to be video-recorded because of concerns regarding anonymity; for this couple, audio recordings were used instead. After each interview, observations were recorded. An in-depth narrative interview style (Kvale and Brinkmann, 2008) was used, asking couples to share their story. According to the narrative interview style, participants' responses dictated the course of the interview, yet an aide memoire containing broad topics to be discussed was also available (see Supplementary Appendix 1, available online). All interviews lasted between 1.5 and 2 h and were carried out by the first author (AI). All donor sperm recipients, regardless their disclosure stance, continued participation over the three interview phases. No individuals were lost to follow up.

Data analysis

All 87 collected interviews (nine couples and 20 individual interviews at T1, T2 and T3) were transcribed verbatim. The grounded theory approach according to Charmaz (2006) was used to analyse the data, as this approach has proven to be useful to obtain in-depth understanding of subjective experiences concerning health issues (Charmaz, 1990; Peddie et al., 2009; Potter and Bhattacharya, 2008). Such a

Table 1 Characteristics of the donor sperm recipient couples.

	Donor sperm recipient couples (n = 10)
Age	
Women	29 years 10 months (26.1–33.5 years)
Men	32 years 11 months (28–39.2 years)
Nationality[a]	
Belgian	9
Other	1
Children	
Pregnant with first donor sperm	8
Pregnant with second donor sperm	2 (couples 2, 9)
Other children present (from previous relationship)	1 (couple 11)
Anonymous donor	10
Disclosure[b]	
Intention to disclose	7 (couples 1, 2, 4, 6, 7, 8, 10)
Intention to not disclose	3 (couples 3, 5, 9)

Values are mean (range) or *n*.
[a]All living in Belgium, no cross-border patients.
[b]All couples maintained the same disclosure stance throughout T1, T2 and T3, except couple 1, which changed from intention not to disclose at T1 to disclose after T2.

qualitative approach results in a complex hierarchically structured list of interconnecting themes reflecting what is central to the experiences of the participants. Because little consensus exists as to how longitudinal qualitative research analysis should be undertaken (Lewis, 2007), Supplementary Appendix 2 provides detailed information on how grounded theory analysis was applied in this study. Codes and categories were initially identified by the first author (AI). To maximize the validity of the analysis, the work applied the method of investigator triangulation by working with internal team auditors (KRD and PR) and an external auditor (Hanna van Parys), who together discussed the coding, developed (sub)categories and observed patterns until general agreement was reached. Analysis was undertaken with the help of software (NVivo version 10.0; QSR International, Burlington, MA, USA).

Results

This paper is based on 87 interviews and what they revealed about the view of donor sperm recipients on parenthood in the context of conception by means of a sperm donor. Thirteen of the total 19 participants exhibited transitions in their views on parenthood over time. All of these 13 intended to disclose the donor conception to their offspring (Table 1). The remaining six participants exhibited little or no transition in their view on parenthood: at each interview time, the topic of parenthood was discussed and these participants' responses remained the same, they intended not to disclose the donor conception to their offspring. Since the two groups exhibited different patterns, they will be discussed separately. Themes are clarified with quotations and references are made to interviewee's gender (M = male, F = female), couple number and interview phase (T1, T2 or T3). Original quotations were translated from Dutch, checked for accuracy by a native English-speaking person also fluent in Dutch and then back-translated by a third person.

Participants who intended to disclose

The majority of these participants reported a transition from initial feelings of insecurity to increased confidence in terms of their experience of parenthood. This study describes this transition, which involves physical resemblance between child and parent, as well as coping mechanisms and triggers of the transition.

Transitions in the meaning of resemblance (biological tie)

Physical resemblance — as perceived by themselves or through remarks made by others — was a major theme for many participants, as physical resemblance seemed to indicate a sense of 'being connected'. Physical resemblance was perceived as either increasing the possibility of social acknowledgment that participants and their offspring form a family and belong together ('That is definitely the daddy, cause he looks so much like you' [M10T3]) or — in the perceived absence of resemblance — as increasing the risk of others questioning their family constitution or of the offspring's feeling less connected to his non-genetic parent ('Hopefully the resemblance stays, (so) that later on he won't feel, ''I'm not the child of my father''' [F10T2]).

Throughout all three interviews, the meaning given to physical resemblance seemed to change. Simultaneously, participants themselves started to emphasize social ties and family interactions more over the three interview phases when referring to what made them a family. Prior to birth (T1), physical resemblance was experienced as very important and paired with many insecurities and anxieties (e.g. 'Will the child resemble us and fit in with us?' [F4T2]). Sometimes the need for resemblance between the child and the mother was expressed, as it was expected to facilitate bonding ('When I can recognize her in the baby, I can still really feel, ''I'm the father'', even when it is not genetically mine. I feared that when the child would be from neither of us, that feeling would be less' [M1T1]). Sometimes this uncertainty regarding the level of resemblance could only be expressed at T2, when the baby was already experienced as 'fitting in', and there was more distance from the previously experienced anxiety. The frequent references at T2 to feelings of relief seem to underline the anxiety and insecurity experienced by many recipients at T1 about the possible absence of resemblance and the risk of not being perceived as belonging together/being related. Other participants perceived resemblance remarks as not trustworthy and therefore not so relevant ('People just see what they want to see' [F8T2]).

At birth (T2), an overall feeling of relief (' ... relief, of course he's our child, and I can see myself in him' [F4T2]) was expressed by many because the baby was finally there and 'fitted in' ('a good match' [M1T2]) and because others acknowledged him/her as their child:

> I think it's more relaxed, because he's there, everything is good, and all family and friends have welcomed him with open arms, and it's like 'everything is good, everything has worked out' [M4T2].

A small number of participants explicitly expressed not wanting to pay attention to resemblance between the offspring and themselves. Looking for resemblance was felt as 'not being respectful to their child', who had his/her own personal traits ('unfair to him' [F4T2]; 'criticizing his looks' [F4T2]; 'She is a being on her own' [F6T2]; 'it's not his job to look like us' [F4T2]). Feeling guilty and ashamed when they 'instinctively' thought about resemblance was expressed by one couple as:

> F4T2: ... a forbidden thought, saying I hope he looks a bit like us, cause he should be happy for how he looks.
> M4T2: Cause it shouldn't matter, ... but you still think it, if you're honest.
> F4T2: It's almost as if when he'd have a characteristic thing [different from us], we would love him less. That's of course not [the case].

At T3, the significance of resemblance was different than at T2. The focus on resemblance was still prompted through remarks made by others, which participants explained as being elicited by the young age of the child ('People still make remarks; that stays' [F6T3]). Yet participants themselves started to emphasize social ties and family interactions more when referring to what connected them, and

made them a family ('You attach to a personality ... not biologic ties' [M1T3]). Biological resemblance was seen as less of a necessity but rather as something that could give a boost to the initial bonding process:

> Now that bond is strong, and it has more to do with his personality than his appearance. But in the very beginning of attachment, it played a role. It's a critical process ... resemblances makes it a bit easier [M1T3].

Transitions in the views on parenthood (social tie)

Prior to birth, most participants reported feeling insecure and anxious about the development of a social tie between themselves (non-genetic parents) and their offspring in the absence of a genetic connection.

Being incapable, prior to birth, to imagine the development of a social tie with their non-biological offspring made some fathers feel very insecure about their parental role:

> He said to me [that] I'm completely replaceable at this stage. Until she's two or three years old, she has no memory of me, I didn't pass on any genes, and another man that takes on the role of father is exactly the same [F5T1].

In general, participants reported fewer anxieties at T2. These first months after birth were experienced as 'overwhelming' with a focus on 'surviving' [F6T2], while having no energy left to wonder about other things. The fact that they were finally parents seemed more relevant at T2 than the way they had become parents (mode of conception) or 'what kind' of parents (genetic or non-genetic) they were:

> First you think, 'that'll determine the rest of my life ... since the pregnancy, we're just Mom and Dad. How he was conceived doesn't matter ... but we know it'll come back' [F8T2].

Most fathers expressed feeling an immediate connection with the child. The birth alone ('It became tangible' [M8T2]) seemed to help put their insecurities to rest, but also their own initial (physical) reaction ('Once she was born, my tears start running, the puzzle was finished' [M8T2]) played a role in this process. However, along with the reassurance of initial fatherhood, the men expressed some insecurity about being accepted by their children as their fathers. The very intimate mother—child bond experienced through primary nurturing, breastfeeding and maternity leave ('a baby is very connected to the mom, you're a kind of spectator' [M4T3]), contributed to some fathers' uncertainty about parent—child bonding. While such insecurities may not be uncommon to fathers of newborn babies, in the context of reproduction by means of a sperm donor, they sometimes triggered specific insecurities related to fatherhood in the absence of a genetic tie:

> I picked him up, he wouldn't stop crying; you picked him up, he stopped. ... He doesn't like me, he feels I'm not his biological father ...' [M7T2].

At T3, some fathers reported that they realized it was possible to develop a tie with their child based on a social connection (through interaction) rather than a biogenetic connection ('I couldn't believe it before, I always assumed the genetic link was necessary, but it isn't.' [M8T3]; 'I was afraid of being rejected, that the natural bond would be so strong that he'd feel it ... That's gone' [M10T3]).

The experience of this emerging bond allowed them to build confidence in the role of father of their child, while their previous anxieties seemed less important.

> Since he's born, the fear you had to go through: [that] 'he might look different, will you love him, will he be affectionate?' That's all ... You're proud. It's a banality, the mode of conceiving ... It has become less important [M7T3].

Simultaneously, fathers realized that the child is not yet aware of the donor conception and that 'full' acknowledgment of that fact could only be acquired in adolescence, when the offspring understands the mode of conception. This was a consistently expressed worry throughout the interview phases. Many fathers expressed their insecurities about being accepted by their adolescent offspring in terms of rejection, while mothers more often feared blame related to their mode of conception. The intensity of the father's fear of rejection seemed to diminish over time. This was observed in the language used to describe their anxiety: 'horror-scenario' at T1 [M7T1] and 'feeling as denial, annoying' at T2 [M10T2], with variations in intensities still noticeable at T3. Almost all men expected to feel hurt by remarks of their adolescent offspring. Very often, the knowledge about the donor conception was described as a kind of potential 'weapon' the offspring could use against his or her father. ('He has a very strong weapon against his dad, to say when he's really angry' [F2T3]; 'you're afraid of that conflict, you give an easy argument to your child to shoot at you ... You know that's going to hurt' [M4T3]). One couple, who already had an older donor offspring of preschooler age, expressed having already gained more confidence through the education of the older offspring, which resulted in greater confidence about conversations surrounding disclosure during adolescence.

> The doubts or the fear, that's less, you feel so confident in your parenting now. You know your child, you feel confident in being a parent. That grows, the bond with your child grows, matures too ... when things get difficult, you're strengthened to manage future problems. You feel there's a base to fall back on ... [F2T3].

Coping mechanism

To cope with these insecurities and to encourage the development of a father—child connection, participants mentioned several strategies (e.g. being practically involved, for example, by being present at the insemination [M4T1—M7T1], viewing the pregnancy as a time to adapt 'mentally' [M4T1] and 'emotionally' [M8T1], support of partner ('You made me realize that there are other things I can do in this family' [M4T1]), reassurance by the partner ('You are the father' [F6T1]), emphasis on the 'couple' aspect of the experience ('I told him, ''we're in this together'', more as project' [F6T1]; 'we as a couple had a problem in getting pregnant' [F4T1]; 'from here on we go

together' [F10T1]), emphasis on the symbolic value of legal documents confirming his position as father [F10T1], encouragement by the fact that the child carries the father's family name ('that he carries my name, makes it more our child' [M4T2]).

Often women tried to facilitate the father—child bonding. For instance, one mother opted for a home birth to create the best possible environment to facilitate bonding:

> I want home-birth to have an intimate surrounding, and my husband can focus on our child ... more time to bond, to build a family. Delivery in the clinic is all about the mother and baby. The father is pushed aside, ignored ... [F6T1].

Other mothers were particularly attentive after birth to open up the mother—child bond and to encourage father—child interaction without their interference: for example, giving the bottle before bed [F6T2], encouraging paternity leave [F4T1]), being supportive of their role as father ('I certainly won't use the word father for the donor' [F6T2]). In one case, a mother was urgently hospitalized and the father was left alone responsible for their child. This made him realize he had a function in their son's life and was needed: 'It was up to me, a big moment, I was fully his dad [...] I'm contributing, I'm part of his history now' [M4T3].

Triggers to transitions

With respect to responses from donor sperm recipients' family, friends and acquaintances, almost all participants frequently and explicitly mentioned feeling accepted among groups of parents and no longer feeling like an outsider after the child was born. They described how society (family, friends, etc.) seemed to be focused on 'the result' ('The way a child is conceived isn't important in society. You're a parent. You're accepted as a father' [M1T2]). Some participants described how parenthood was experienced as normalizing and de-stigmatizing ('''I can't conceive'' is completely gone now' [M1T2]; 'It's really just so normal. It feels good, the reactions are normal and spontaneous' [F8T2]). As one man said:

> You can be a benchwarmer in the winning team. Later, nobody remembers if you scored or were a benchwarmer. You won the championship. Same with family: there's a baby, you've a family. That's the main thing [M1T2].

The reactions of others to the donor conception, and especially their absence of reactions, elicited for some participants the feeling that the donor conception was not a dominant aspect of their family life. These participants started to detect characteristics they had in common with naturally conceiving families and they referred more frequently to such experienced similarities, rather than to the differences. This seemed to lead to a feeling of normalization and de-stigmatization for some ('We realize now that donor insemination is one aspect of our family, but we've lots of ''normal'' aspects' [F1T3]). The emerging feeling of confidence seemed also to strengthen them against the perceived stigma: 'by having him, your internal world changes. You don't start off anymore with what others might think, but you think ''they just need to accept it''' [M1T3].

Whereas previously, recognition of fatherhood was mostly described as coming from the partner, family and friends, several fathers mentioned at T3 that the interaction with their child was an important factor in their feeling of being a father ('That father feeling I really noticed when he started interacting with me' [M1T2]). This was sometimes expressed at T2, but more often at T3, when the father started to notice the child's attachment behaviour towards him. This was experienced by some fathers as an acknowledgement of their fatherhood by the child ('It does give a good feeling when they say ''Daddy''' [M8T3]).

Some participants explicitly mentioned how anxiety and insecurity seemed to hold them back in their disclosure process to others ('Then it's very easy to tell everyone, but you still have this ''I don't know how he's going to react''' [M4T1]) and how, conversely, confidence seemed to facilitate the disclosure process:

> All the questions 'Will I accept the kid? Will he accept me?' are no issue, because you experience it [the donor conception] as not an issue [M4T3].

and

> F2T3: There's really nothing to be ashamed of to tell ... it's just the way we built our family, we are so proud of our family. Why should we just not say that? That is much more than in the beginning, then we were too much afraid.
> M2T3: Yes that's true, and we hadn't told family at all.

Participants who intended not to disclose

Participants who intended not to disclose the donor conception indicated that the donor's involvement stopped being relevant at birth, which was when their wish for children was fulfilled ('It's like [the child was] totally ours, conceived by us, although we know it didn't happen that way' [M9T3]). The donor was seen as a means to having a child, and becoming a parent was the most important part of the experience. For most of these parents, non-genetic parenthood was not reported as an important topic after the birth, as their experience of parenthood was principally seen as similar to that of naturally conceiving parents.

One concern that was present throughout all three interview moments was the anxiety about discovery by others about their non-genetic parenthood (and their infertility) through non-resemblance. Prior to birth, these couples seemed very conscious of the risk that, as a result of differing physical traits (non-resemblance), the donor conception could be revealed ('How should I justify myself then?' [M1T1]; 'She might be totally different. How should I explain that?' [F5T2]) or that the perceived absence of resemblance might increase the risk of others questioning their family constitution ('If it really doesn't resemble him ... everyone thinks ''I can't imagine that's a child of X [husband]''' [F3T1]). After birth, some participants expressed

feelings suggesting that they felt not fully at ease about resemblance at T2, as they realized that babies' appearances will change and different physical and character traits might emerge later on ('I fear later, cause now it's still a baby, you can't see' [F3T2]); 'It's when they grow up, you'll see it very well' [F5T2]). One couple observed different physical traits in their child (e.g. length), which enhanced the mothers' fear for discovery.

Discussion

This study should be seen in the socio-cultural context of third-party reproduction in Belgium, where no national consumer organization for (potential) third-party reproduction recipients exists and social media (women's magazines) provide little and low-quality information on infertility issues in Belgium (Schillebeeckx, 2012). Moreover, a campaign to encourage openness and understanding towards fertility treatments with donated gametes was launched June 2012 (De Maakbare Mens, non-profit organization specialized in informing people about medical and biotechnological developments and the ethical questions they pose, 2013). The campaign focuses on: (i) image-forming concerning gamete recipient treatments; (ii) the dominance of the traditional family and biological parenthood and creating more openness for alternative family formations; and (iii) the taboo surrounding gamete recipient treatments.

Main findings

Recipients who intended to disclose the donor conception to the offspring exhibited a transition from feeling anxious about becoming a donor sperm recipient parent prior to birth to a feeling of growing confidence at the toddler stage. Previous anxieties regarding physical resemblance at birth and the importance of biological ties decreased. Simultaneously, emerging social ties became more significant for their understanding of family. The other transition came following birth, when recipients felt recognized and acknowledged by others as parents, which elicited feelings of normalization. Being able to actually engage in parenting and develop parental relations with the offspring through mutual interaction seemed to enhance confidence about their positions as parents. Donor sperm recipient parents realized that challenges still lie ahead, yet this early confidence seemed to give them strength to tackle future insecurities and made them feel more convinced about their decisions to use donor insemination and to eventually disclose this means of conception to their offspring.

Recipients who intended not to disclose the donor conception to their offspring did not exhibit the above transitions. Any acknowledgment of third-party reproduction was confined to the phase of conception, following which their parenthood was reported as being the same as that of naturally conceiving parents. However, insecurity about the risk that physical traits of the offspring might reveal the non-genetic parenthood and related infertility remained present for most of them.

Findings in relation to other studies

These findings are in line with Sandelowski (1995), who contrasted the transition to parenthood between fertile and infertile couples and among different groups of infertile couples (adoptive, artificial reproduction, spontaneous conceiving and conceiving with donor gametes). She observed both overlapping and specific challenges among these groups. Naturally conceiving fathers also experience anxieties and uncertainties in their transition to parenthood as relations change and new relations are formed (Barclay and Lupton, 1999; Barclay et al., 1996; Chin et al., 2011; Deave and Johnson, 2008; Genesoni and Tallandini, 2009). The current study showed similar anxieties ('overlapping challenges') as those described in the above-mentioned studies and 'specific challenges' in relation to non-genetic parenthood: how to assert authority as a parent in the absence of a genetic tie when living in a culture where biogenetic connections between family members are more highly valued than social ties ('staking a claim'; Sandelowski, 1995). Like Sandelowski's adoptive couples, the current participants emphasized the biological match (resemblance) prior to birth, but when social ties emerged, the biological element became less important, as observed also by Hargreaves (2006). Similar feelings of discomfort with non-genetic parenthood in oocyte recipient mothers were observed by Kirkman (2008). In the early stage of parenthood, participants in the current study expressed having no script for social parenthood. To cope with this insecurity and to encourage the development of a non-genetic parent–child bonding, participants applied several strategies (e.g. acknowledgment of parent position by partner and other family members before the child is able to, opening up the mother–child bond). Similarities and dissimilarities can be seen with the findings of Nordqvist (2012) on lesbian couples. However, lesbian couples were more active in negotiating a script for parental authority of the non-genetic parent by emphasizing the foundational importance of the couple's relationship, partner intimacy, parental love, care and intent. The fact that lesbian couples cannot 'pass' as a hegemonic 'family' or as a parental unit that is able to reproduce biogenetically (Nordqvist, 2010) may trigger their more active approach to negotiating non-genetic parenthood.

Prior to birth, a major concern of the donor sperm recipients in this study was being divergent from the biogenetic cultural norm of parenthood and feeling different from biological parents. This resulted in a fear that others will not acknowledge them as 'real' parents. Thorn (2006) pointed out that donor sperm recipient families, being partly based on social ties, run the risk of being stigmatized. However, birth triggered a change regarding their fear for stigmatization, as the donor sperm recipients in the current study felt accepted by society as 'real' parents following the birth. This resulted in feelings of relief and normalization. Recipients' own initial focus on their differences from biological parents evolved into a heightened awareness of their similarities with biological parents. In general, there exists a gap in the research literature on how societies view donor sperm recipient families (Hudson et al., 2009), which could help to clarify the divergence

between the fear of stigmatization and actual stigmatization. Research by Ives et al. (2008) on the meanings of fatherhood is meaningful within this context. Their findings, from the UK, indicated a shift to attaching more importance to social relationships opposed to biological relationships, as fatherhood was found to be foremost about the relationship the man has with the child. Yet, cultures vary among countries.

van den Akker (2001) has pointed out that the incongruence between the real family (partly based on non-biological social ties) and the ideal family (fully biologically connected), as defined by society, creates cognitive dissonance and can hinder disclosure. Also, Daniels et al. (2007) suggested that increased confidence in the use of donor insemination, positively affected the intention to share information with the future offspring about the donor conception. The current findings are in line with both van den Akker (2001) and Daniels et al. (2007).

Strengths and limitations

This is a unique qualitative study using a longitudinal design enabling the observation of transitions. The absence of drop outs in a time-consuming study can be seen as remarkable, especially for the participants who intended not to disclose. The use of a qualitative methodology made it possible to highlight meanings of parenthood and enhance understanding. The study group was self-selected. The small sample size does not allow for generalization, although the described patterns of transition and consistency can be tested in larger groups (e.g. non-disclosing couples) or with different groups (e.g. oocyte-recipient couples).

The group of non-disclosing parents (six parents in three couples) was very limited, and couples varied in contextual factors (e.g. knowing about their infertility from youth or discovering it recently, previously conceiving other children). Further data collection is needed to obtain the level of data saturation during analysis. In addition, attempts to investigate non-disclosure are hampered by the very aspect being examined, namely their unwillingness to disclose non-disclosure (Borrill et al., 2012). Non-disclosing parents perceived the effects of third-party reproduction as being confined to the phase of conception. Subsequently, interviews about the experience of third-party reproduction in the stage of parenthood were challenging. Alternative ways of data collection or different interview set ups should be considered in order to collect further rich data and enhance the understanding of non-disclosing parents.

In qualitative longitudinal research, the researcher—researched relationship affects both researcher and participant over time. Participants (women and men) mentioned that, with time, they became less occupied with 'making a best impression' (giving desirable answers) and felt generally more at ease in expressing anxieties and insecurities. The research interviews may have had a therapeutic value for some of the participants, as it helped the couple to talk about reproduction by means of a sperm donor. This should be situated in the socio-cultural context where most participants expressed a lack of possibilities to exchange experiences with others. Data on couple dynamics and possible differences between partners would complete the described transitions. Due to the extensiveness of the data, this will be addressed in a separate paper.

Research and clinical implications

The parent—child relationships in these young families were still emerging, and they will experience an ongoing negotiation of social fatherhood in a cultural context where biological connections are primarily valued. Further follow-up research is needed. Additional research is also needed to understand the differences between those parents who intend to disclose and those intending not to disclose in terms of managing the incongruence between the real and ideal family, as defined by society.

Most couples who participated in this research expressed at different times the need for a preparation programme when starting a donor gamete fertility treatment. A psycho-education programme adapted to the family life stages of donor sperm recipients would help them to prepare and manage the donor conception process with more confidence. Despite their increased confidence, anxieties surrounding future adolescent years persisted among parents who chose to disclose the mode of conception to their offspring. They felt that no information was available on the experience of the offspring who is born with the assistance of an anonymous sperm donor and who is told about the donor conception from pre-schooler age (Blyth et al., 2012). The ongoing need for support and information was expressed by most of the participants intending to disclose (e.g. opportunities to exchange experiences with other donor sperm recipient parents; meet families with older donor offspring; have access to information on this topic, both in written form and in the form of education and support sessions).

These findings provide professionals working in the fertility clinic with the necessary information about the psycho-social development of donor sperm recipient families to help prepare their patients for their transitions into parenthood from the beginning of treatment. Making information available about and creating opportunities for meeting other donor sperm recipient families can diminish feelings of insecurity and ostracism (Thorn and Daniels, 2007).

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Appendix A. Supplementary data

Supplementary data associated with this article can be found, in the online version, at http://dx.doi.org/10.1016/j.rbmo.2013.09.021.

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