Parenting and child well-being in families created using gamete donation

Presentation by Dr Vasanti Jadva

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Donor treatment often focuses on parents and little is known about how the children conceived fare.

This video was filmed at VARTA's Twilight seminar 'How are you going? - Experiences of donor conception' (8 April 2013). Dr Vasanti Jadva presented the results of a longitudinal study of families created using gamete (sperm and egg) donation. The children of the families were born around the year 2000 and data was collected at ages 1, 2, 3, 7 and 10 years.

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Thank you very much, thank you for inviting me to talk to you all here today and to share our research findings. I am going to be presenting the results from a study lead by Professor Susan Golomboc. There is a team of researchers that has worked on this study since it began over ten years ago and I have been involved in it from the beginning. The project started around the time of the new millennium and is looking at parenting, parent child relationships and child outcome in families created using assisted conception, specifically egg donations, sperm donation and surrogacy. Today I will be focussing on the data from families and children born using egg and sperm donation.

Over the years we have published the findings that I am presenting today as journal articles and here are a few of them. Further details of what I will be talking about today can be found in these publications and there are more publications available on the Centre for Family Research website.

I just want to begin by giving a very brief summary of how gamete donation works in the UK. At the time we recruited participants to the study anonymous sperm donation was available from clinics, you could use known donors, for example family members or friends but the vast majority of couples were using anonymous donors. It wasn't until 2004 that the law to remove donor anonymity came into force, so now all donors donating at UK clinics have to be ID released. That is they have to be open to being contacted by the child when the child reaches the age of 18 years. Likewise a child can apply for identifying information about their donor when they reach the age of 18 years. It is not possible in the UK to make contact with an ID release donor before the age of 18.

The children in our study were born before this change in legislation. These children can however join a registry run by the human fertilisation and embryology authority which is open to children born after 1 August 1991, the date that the HEFA came into force. But again the children have to be aged over 18 to join and will only be able to obtain information about their donors identity if the donor has re-registered of being identifiable.

Parenting and child well-being

We recruited our original sample of 50 egg donation families and 51 sperm donation families from 9 fertility clinics in the United Kingdom. We invited two parent, heterosexual couples with a child aged between 9 and 12 months to take part in our study. The non-ART group was recruited through maternity wards and certain selection criteria had to be met. For example mothers had to be aged over 30 and the pregnancy had to be planned. All the donor insemination children and 36 egg donation children were conceived using and anonymous donors. Families were visited at five timed points, when the child was aged 1, 2, 3, 7 and then most recently at the age of 10.

At all ages families were visited at home and tape recorded interviews were carried out with the parents to assess quality of parenting and parent child relationships. A sub section of the interview focussed on the areas of gamete donation. Parents were also asked to complete questionnaires. At the later ages of 7 and 10 years we carried out an observational assessment of the parent and child interacting together and we also interviewed the children themselves. We also asked the child's teacher to complete the strengths and difficulties questionnaire which is an assessment of the child's psychological wellbeing.

At age one, we assessed parents' quality of parenting, their feelings about their parental role and their enjoyment of parenting. These variables took into account information from the entire interview and were coded using strict coding criteria. The quality of parenting consisted of four components which have been found to be associated with children's wellbeing. These were: expressed warmth, emotional over involvement, parent child interaction and sensitive responding. Expressed warmth was based on the parents' tone of voice, their facial expressions and their spontaneous expressions of warmth, sympathy and concern about any difficulties experienced by the child. Emotional over involvement measured the extent to which the family life and the emotional function of the child was centred on the child and the extent to which the parent was over concerned or over protective of the child. Parent child interaction measured the extent of which the parent and the child spent time together, enjoyed each other's company and showed affection to one another. Sensitive responding measured the mothers' ability to recognise and respond appropriately to the child's needs, feelings about parental assessed, feelings about being a parent. And the enjoyment of parenting measured the expressed enjoyment as well as reservations about being a parent.

So in terms of our findings, at age one, we found no differences between gamete donations mothers and fathers and their psychological health or marital quality. In terms of parenting we found that gamete donation mothers showed higher levels of warmth to their child and enjoyment of parenthood compared to the control group of non-ART parents. And that they showed greater emotional involvement then non ART mothers. No differences were found in other measures of parenting.

The fathers from gamete donation families were also found to show greater involvement then non ART fathers but few other differences were found. No differences were found in infant temperament which was assessed using the questionnaire assessment called the infant characteristics questionnaire. Thus overall findings from age one showed few differences and where differences were found these indicated better parent child relationships for gamete donation families.

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We used a different interview at age two called the parent development interview. This interview is derived from attachment theory and is based on the view that parents thoughts and feelings about their child influences parenting behaviour. Unlike the interview used at age one which asks parents to describe their child and their relationship the parent development interview asks parents to describe their own child's experiences during specific moments of interaction.

So for example the parent is asked to describe the child's reaction to normal separations, routine upsets and parental availability, followed by questioning that addresses the parents' behavioural and emotional responses to these different situations. In this way the parents experiences and representations of the dynamics of the relationship between themselves and the child can be evaluated.

The interview is coded using a coding manual and ratings are made on a number variables relating to the parents affective experience and the child's effective experience. Again we ask parents to complete questionnaires and we also assess the child's cognitive development using the standardised assessment tool called the Bailey Scale of Infant Development.

At age two findings were generally similar to those at age one. That is overall we found no differences between gamete donation families and non-ART families. The few differences we did find was found on the questionnaire called the Vulnerable Child's GAL, which showed that gamete donation mothers viewed their child as more vulnerable than non-ART mothers. Also some of the variables on the parent development interview showed differences. Gamete donation mothers showed higher levels of joy and pleasure then non ART mothers and the egg donation mothers scored higher on this then the donor insemination mothers.

Higher levels of over protectiveness among donor insemination then egg donation mothers was also found. No differences were found between fathers in each group and once again no differences were found in the child socio motional development and their cognitive development.

At age three we used an interview similar to that used at age one. 41 DI mothers, 41 egg donation mothers and 67 non ART mothers were interviewed. Once again at age 3 we found few differences. We did again find that gamete donation mothers scored higher on warmth to the child and higher on mother child interaction. Both of these indicating better parenting amongst gamete donation mothers. No differences were found for the child psychological assessment.

So overall findings from these first three phases of the study showed that gamete donation families were doing well. And in some cases their parenting was rated as being better than non-ART families. This may be because parents who are using gamete donation have often experienced years of infertility treatment and so it is perhaps unsurprising that when they finally become parents they are highly committed in their role.

Parenting and child well-being

One of the areas of our data that we are focusing on now is looking at the longitudinal data we have and examining changes over time. One area we have examined is a psychological adjustment of children born using egg donation and donor insemination from age three to age ten. Children psychological adjustment was measured at age three, seven and ten using the strengths and difficulties questionnaire completed by mothers. The questionnaire produces a total score of the child's behaviour difficulties from sub scales that relate to emotional symptoms, conduct problems, hyper activity, attention and peer problems. High scores on this questionnaire represent greater difficulties.

At age seven and age ten we also ask the child's teacher to complete the same questionnaire and we found a modest agreement between the mothers and the teachers' reports. We also used interview data on mothers' quality of parenting and questionnaire assessments of marital quality, depression and anxiety so that we were able to assess positive aspects of parenting negative aspects of parenting and psychological distress.

So according to what we know about children's psychological health we would expect an improvement in their wellbeing over time so we looked at the data and found that children's psychological adjustment for the non-ART groups did, as expected, improve over time. However for the DI and egg donation groups, psychological adjustment remains stable over time.

For parenting variables the DI mothers did not differ from non-ART mothers on parenting or mothers psychological wellbeing. For egg donation mothers positive aspects of parenting were higher than the non-ART group but they did not differ for negative aspects of parenting or for psychological wellbeing. This higher level of maternal positivity shown by egg donation mothers may possibly be associated with their older age and the greater likelihood of having a singleton child.

The issue of whether or not children are told about their conception and how this knowledge or lack of knowledge affects their development has become an increasingly interesting area of research. In the past the majority of families didn't tell the child and so looking at the impact of disclosure was not possible. With the relatively recent move towards disclosure and the wider recognition that children should be told about their inception, we are finding that more of the parents in our studies are telling their child about their conception. So we were able to compare the data from families who had disclosed to those who had not. So we round the analysis by dividing the gamete donation families into two groups, those who had told the child about their conception and those who had not.

We then compared these new groups of disclosed versus non disclosed families to the non-ART group. Here significant improvement in children's psychological adjustment were found again in the non-ART and in the disclosed families but not in the non-disclosed groups. Thus although the finding suggested that children conceived by gamete donation had different mental properties to non-ART children it seems that it is the gamete donation children who are not informed of their donation conception who showed the less improvement in behaviour over time.

Thus where our previous cross section analysis has found a few differences between disclosing and non-disclosing groups, longitudinal data analysis appears to suggest that disclosure may be beneficial to the child outcome.

We also found that mothers in the non-disclosing groups scored higher than the non-ART mothers for psychological distress, this finding parallels findings from earlier studies of adopted families in which parents kept the child's adoption a secret. In those studies of adopted mothers it was thought that psychological distress maybe a reflection of the raised levels of stress and feelings of lack of entitlement as parents. Keeping secrets has been shown in other research to involve considerable cognitive and behavioural effort often causing preoccupation with a secret which could produce psychological distress.

Further studies with larger sample size are needed to see if these findings are replicated in other samples in earlier conception families.

I would now like to briefly talk about the pattern of disclosure over the years so like I mentioned recent years have seen a shift in use over disclosure to the child. Whereas in the past doctors encouraged parents to try and keep the birth of the child a secret, now in the UK they are encouraged to tell the child about their birth. There are also greater resources and support groups available to parents to help with telling their child. There is general consensus now that openness is the best policy.

So what are the families in our longitudinal study doing about telling their child about gamete donation? Looking at what parents said over the ten years, at age one we can see that more egg donation parents were intending to tell compared to DI parents. At age three a small handful of parents had told the child about their conception. At age three again more egg donation parents were planning to tell their child compared to donor insemination parents. A higher proportion of DI parents were planning not to tell the child.

At age seven more egg donation and sperm donation families had told the child compared to the earlier years; so most parents were telling their children between the ages of three and seven years.

When we had the data at age seven we looked at disclosure patters over time to see whether intentions to tell or not to tell when the child was age one was related to what actually happened when the child was aged seven. And so here we can see that at age one ten families, DI families said they had planned not to tell and 5 said that they planned to tell. And this generally remained the same for most of them at age seven. Only one DI family had gone on to tell the child and one DI family and one egg donation family was undecided at age seven.

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For families who are uncertain when seen at age one about half of DI families had decided not to tell with the remainder still being undecided. For egg donation families the outcomes at age seven were more varied. Of those parents who were undecided at age one, two had gone on to tell the child, one was planning to tell, one had decided against telling and three remained uncertain.

For families who had planned to tell when seen at age one over half had told the child by the age of seven and most of the others were still planning to tell the child. Only one DI family had said they were no longer going to tell the child. So on the whole parents' intentions to tell the child remained relatively stable over the years. The undecided group are the most likely to change their minds about telling by age seven and different patterns were observed for all DI parents and egg donation parents with more donor insemination parents deciding not to tell.

The other aspect that we were interested in was parents' agreement about whether or not to tell. We usually carried out separate interviews with the fathers and the mothers and we examined the responses they gave to the question of whether or not they will tell the child was the same. We found a few instances where different answers were given by mothers and fathers. Discrepancies between parents occurred most often when one parent was coded as being uncertain. Sometimes they would be uncertain because they knew that they didn't agree with their partners decision on whether or not to tell. So for example one egg donation mother said, " I would be more likely to talk to the child, maybe not now but in a couple of years' time and talk it through with him, but I don't think my husband wants to do that, he doesn't want him to know anything, but I don't know, I'd have to ask my husband, I think we have a lot of talking to do about it."

We also found cases of partial disclosure to the child where the parent reports having told the child but when further questioning by the interviewer reveals that although they may have told their child about IVF they hadn't mentioned using donor gametes. For example, "Well we have told him that he is an IVF baby but we weren't telling him what the problem was. We will only tell him that if the time arose to tell."

Often reasons for telling about donor gametes was because parents felt the child was too young. But even with other aspects of disclosure we found parents disclosing impartial information only. So for example telling their friends that they had IVF or fertility treatment and not mentioning gamete donation; or in one instance a mother had told her child about egg donation but had not disclosed that the donor was someone she and the child knew. And the reason she gave her this was because the donor had wished to remain anonymous.

At ages seven and ages ten we interviewed the children themselves about how the felt about being donor conceived. We found that at age seven children found little understanding of their donor conception but by age ten years children were able to talk more coherently about the birth. So for example, "She had the eggs put into her and then my dad's sperm mixed it up and then I got created and then she said like about all the particles and stuff that, like, run about and make stuff." And another child says, "My dad couldn't really make the seed so I had a seed from a special man who gave one up."

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Of those children who talked about their donor conception most have neutral feelings or describe their donor conception in a positive way, for example, 'I am fine, I don't feel any differently, I am just carrying on with my life, I don't really think about it much because there is much more special, like, cooler things, so I don't really care about it much'. And another child says, 'I am alright just happy I have got my mum and my dad really'.

However some children's responses were more mixed or negative, for example one child from an egg donation family described feeling a little bit strange. When children were interviewed at age ten they were asked to describe how they felt when they first learnt of their donor conception. Children's responses range from feeling amazed or shocked to feeling fine. So this child, egg donation child said, 'just a little bit shocked really, yeah I just didn't realise that it was like that, I thought it was just a normal way of people getting made' and another child said, 'I was quite happy, it felt a bit strange, like weird, or maybe I didn't understand'.

Most children reported that they did not discuss their donor conception with their friends, which could be indicative of feelings of discomfort or embarrassment. 'That is the only secret that I haven't told any of my friends because I don't really want anyone to know'.

Only four out of sixteen children had said that they did talk to other people about their conception. For example this child had said, 'well at school I had been showing off but at school most of my friends definitely my best friends, yeah most of my friends at school about three or four friends you know'.

However it is possible that donor offspring feel more comfortable talking to friends about this issue as the children grow older. So how do children feel about the donor? At age ten most of the children expressed feelings of gratitude towards the donor or described the donor as being a kind, nice and generous man. 'I am very grateful for him and I am very thankful for him, and it is weird that we can't ever meet him because I thought we could be like friends, be like my mum and dads friends'. And another child said 'I don't really think about him, all I do is look at a picture of me and say, that man, the man who helped must, you know, have the same colour of hair or the same colour eyes, so I don't really think about it much'.

Apart from a few egg donation families that knew their donor most of the children are born using anonymous gametes. It is important to see how the children would feel about the fact that they are unable to access any further donation about their donor given that children born just five years later will be able to find out the identity of their donor. This will be better understood by following the children as they grow older and gain a deeper understanding of their conception.

Parenting and child well-being

So to summarise, our findings suggest that gamete donation families do well and do not differ from non-ART families with regards to parenting and child development. There are indications that disclosure may have beneficial outcomes for gamete donation children. Disclosure itself is not a straight forward process, we are aware, and other studies have also shown, that parents disclose information that is age appropriate for the child. Giving the child more information as the child develops a more sophisticated style of understanding.

But our studies are also finding that in some instances parents are choosing to never disclose all the details of their child's conception, opting instead to disclose partial information. This can potentially lead to a problematic scenario where the parent feels that they have been open with the child but the child is not aware of the whole story. Given that most parents in our study had told at least one other person, for example a family member or a friend about the details of their child's conception, there remains a possibility of a child finding out from somebody else.

For those children who are aware of their conception most feel positive or indifferent about the birth about age ten. At the age of ten years it is possible that children's understandings and feelings about their birth will be a reflection of their parents' narrative. As the children grow older their own independent understandings will develop.

We aim to follow up the children as they enter adolescents when issues around identity in particular become ore salient.

We need to be aware of some of the limitations of the study, for example because of the nature of the study with it being a longitudinal study we do have families who we lose to follow up, so we do not know how the families that have not been seen in subsequent phases are faring.

All the children in our study were born before the change in the law that removed anonymity so the findings may not be representative of people who are currently accessing gamete donation in the UK. Nevertheless the study is the only longitudinal study to be following families that have used gamete donation to have a child and the findings show that overall family relationships and children's wellbeing up to the age of ten years is not negatively active by this root parenthood.

The End

For more information about donor-conception, contact Kate Bourne on 03 8601 5250 or email kbourne@varta.org.au.