

Original citation:

MacCallum, Fiona and Widdows, Heather (2012) Ethical issues in embryo donation. In: Appleby, J. and Pennings, G. and Richards, M., (eds.) Reproductive donation : practice, policy and bioethics. Cambridge: Cambridge University Press, pp. 270-288. ISBN 9780521189934

Permanent WRAP url:

<http://wrap.warwick.ac.uk/65776>

Copyright and reuse:

The Warwick Research Archive Portal (WRAP) makes this work by researchers of the University of Warwick available open access under the following conditions. Copyright © and all moral rights to the version of the paper presented here belong to the individual author(s) and/or other copyright owners. To the extent reasonable and practicable the material made available in WRAP has been checked for eligibility before being made available.

Copies of full items can be used for personal research or study, educational, or not-for profit purposes without prior permission or charge. Provided that the authors, title and full bibliographic details are credited, a hyperlink and/or URL is given for the original metadata page and the content is not changed in any way.

Publisher's statement:

© Cambridge University Press

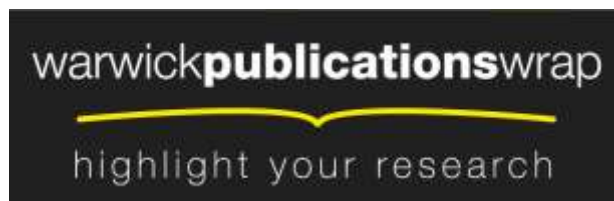
Published version available:

<http://www.cambridge.org/gb/academic/subjects/psychology/developmental-psychology/reproductive-donation-practice-policy-and-bioethics?format=HB>

A note on versions:

The version presented here may differ from the published version or, version of record, if you wish to cite this item you are advised to consult the publisher's version. Please see the 'permanent WRAP url' above for details on accessing the published version and note that access may require a subscription.

For more information, please contact the WRAP Team at: publications@warwick.ac.uk



<http://wrap.warwick.ac.uk>

Ethical issues in Embryo Donation

Fiona MacCallum and Heather Widdows

INTRODUCTION

The use of a donated embryo in assisted conception was first reported by Trounson et al. in 1983, when a female patient was successfully treated using an embryo created from a donor egg and donor sperm. It was deemed by the clinicians involved to be no different from egg or sperm donation, and indeed they postulated that it could be less problematic in that there would be no inequality in the genetic contributions of the parents¹ (Trounson et al., 1983). However, embryo donation (strictly defined as treatment using donated embryos) raises distinctive ethical concerns and questions. In this chapter, we will focus on three areas which we consider key to debating these concerns, covering regulatory issues, the structure of the practice of embryo donation and ARTs generally, and the individual perspectives of recipients and donors. The first topic to be examined is the disparity in parenting selection criteria between embryo donation and adoption, two processes that share a structure whereby both result in a couple parenting a genetically unrelated child. In 2002, we examined the size of this disparity and concluded that it was not justified (Widdows and MacCallum, 2002). Here, we revisit and update the debate, in the light of changing laws regarding donor anonymity and changing social attitudes towards donor conception. The second key area relates to the decision whether to donate embryos in the first place. We investigate the extent to which the moral status of the embryo, as frequently debated in ethical analyses, has any influence on decisions of potential donors, and the need for consent to donation to be truly fully informed. In addition, there are ethical issues relating to the exploitation of donors (or ‘vendors’), particularly poor vendors, which are unlikely to be addressed by improving informed consent. Finally, we address matters relating to the way in which embryo donation impacts upon society’s perceptions of children. Developments in the ability to choose characteristics of donors, and the varying laws existing in different jurisdictions worldwide have produced structural changes in the practice of ARTs. Increasingly, the ethical debate has focused on ‘reproductive tourism’ and the ethical disquiet arising from this global market.² Central to this argument are increasing concerns about the commercialisation of reproductive treatment, and the commodification which may result for the ‘products’ of this trade; the children created using these technologies.

PARENTING SELECTION CRITERIA FOR EMBRYO DONATION COMPARED WITH ADOPTION

If treatment using donated embryos is successful, the recipient couple will rear a child that is genetically unrelated to them and who may have full genetic siblings elsewhere. It has been contended therefore by some that embryo donation strongly resembles adoption, and should ‘receive the same safeguards’ (Bernstein et al., 1996). In the UK, the two procedures are regulated in very dissimilar ways, particularly with respect to the criteria applied to embryo donation recipients as compared with adoptive parents. The primary difference is that in adoption the selection process is lengthy and detailed and focuses on social and emotional factors, whereas, in embryo donation the process is less involved and focuses on medical criteria. It should be noted that this analysis is primarily focused on the UK, and while similar issues apply there may also be places where they do not, for example in the USA where

¹ Parents, when used without a qualifying prefix (such as “genetic”) indicates the social parents who have responsibility for the child’s upbringing.

² We recognise that this is a contentious term, however we feel it is appropriate in at least some instances (although arguably not all), particularly where the aim is to subvert the legislation of the home country to meet certain preferences rather than simply to access any treatment which will result in a successful live birth: e.g. the case of UK couples travelling to Spain to seek anonymous donors.

‘embryo adoption’ agencies exist which do apply similar parental selection approaches to traditional adoption.

In order to be approved for adoption in the UK, a social worker is assigned to the family and begins an assessment procedure which takes about eight months, and involves several home visits. Following this, the social worker writes a report detailing the family circumstances, both factual but also descriptive information, focusing on areas such as the prospective adopters’ personalities, their relationship history, the stability of the family structure, their feelings about adopting, and their reasons for wanting to do so. Although the aim is to fully prepare and educate prospective adopters, it can be perceived as an intrusive procedure and is certainly time-consuming. However, the focus of the adoption services is on the needs of the adopted child, so this intensive process is deemed essential to protect the child’s best interests.

In contrast, the primary criterion for parent selection in embryo donation is whether the mother is ‘medically suitable’, not on whether the couple are socially and emotionally suitable to be parents. The only national social requirement is found in the HFE Act which states that a woman “shall not be provided with treatment services unless account has been taken of the welfare of any child who may be born as a result of the treatment (including the need of that child for supportive parenting)” (HFEA, 2008). The HFEA guidance on how to conduct the welfare of the child assessment suggests taking a medical and social history from each patient and their partner, and interviewing the couple separately if necessary. In cases where these assessments raise concerns that the couples may not provide supportive parenting, clinics are advised to seek further information from relevant sources, e.g. GPs or social services. Consent to seek this information must be sought from the prospective patients, and refusal to allow information disclosure can be taken into account when deciding whether to provide treatment.

The instruction to consider the welfare of the child does add a small moral and social dimension to the decision-making process. However, clinics are advised by the HFEA only to refuse treatment if they consider that “any child who may be born or any existing child of the family is likely to be at risk of *significant* harm or neglect” (emphasis added). In practice therefore, only those who are regarded as potentially physically harming their future children are likely to be refused for social reasons. Furthermore, since the decision regarding treatment is seen primarily as medical, it is likely to be made by a medical practitioner, rather than a professional trained in considering social and psychological factors. Most likely to be refused embryo donation treatment are thus those who are medically unfit, particularly when the HFEA publishes clinic success rates on its websites as a guide to patients. Given the disparity between embryo donation and adoption, there are three possible justificatory reasons which should be examined (Widdows and MacCallum, 2002): parent intentionality, the gestational experience and the technological imperative.

Parent intentionality is considered primary by some when it comes to founding a family. A distinction is made between family creation methods which actually cause a child to come into existence and those which embrace already existing children into a new family structure. On this model children who are adopted are different from those created by embryo donation (and indeed all ARTs) because adoptive children do not come into being because of parent intention. The significance of the intentionality argument when deciding parental rights and status of children conceived through ARTs is seen by its use as the main line of reasoning in some landmark legal judgements. In the US state of California, for example, courts have consistently sided with the rights of the intended parents in cases of surrogacy or gamete donation disputes. In *Johnson vs. Clavert*, the genetic mother rather than the gestational surrogate was ruled to be the legal mother, with the court stating that the woman who arranged to “bring about the birth of a child she intended to raise as her own – is the natural mother” (1993). A later case extended this reasoning to a situation where the intended

parents were not genetically related to the child, but were still ruled to be legal parents by dint of their intention at the beginning of the surrogacy arrangement (1998). This has been described as the ‘but for’ test (Douglas, 1994). ‘But for’ the parents initiating the surrogacy arrangement, there would be no pregnancy; thus the parents’ intent is causal in the child’s creation³. UK law does not recognise intention as being of significance to the same degree (the birth mother is always the legal mother). However, intentions do play a role with gamete donors, for example, where it is their lack of intention to become a social parent that allows them to waive legal or moral responsibilities for their genetic offspring. Following the intentionality argument, ‘but for’ the wishes of the embryo donation parents, the child would not exist, whereas in adoption, the child exists regardless of parental intent. Thus, it could be argued that although the would-be adoptive parents have become such by acting upon their desire to parent, their desire has not caused the child to come into existence. Hence, the argument is that intentionality is a ‘causal’ difference between embryo donation and adoption.⁴

Although this ‘causal’ difference is obviously present, we argue that it is not as significant as the intention to parent (Widdows and MacCallum, 2002). The underlying intention of adoptive and embryo donation parents is the same – to be parents. The fact that the means used to achieve this differs is less important than the fact that the end goal is equivalent. With similar intention in both cases, the intentionality argument does not carry enough weight to justify the disparities in parenting criteria.

The second potential reason for the divergence is that in embryo donation there is a biological link to one parent, through gestation. This has a number of consequences; legal, emotional, social and practical. From a legal perspective, the embryo donation mother (and her partner) has parental status from birth, whereas in adoption parental rights and responsibilities have to be transferred after birth. This creates a clear difference between the processes but once again it could be argued that is a difference in means rather than ends. Once the adoption procedure is completed, adoptive parents’ legal status is identical to that of embryo donation parents.

Emotionally, the gestational link is said to be important as it allows the opportunity for the mother to form a prenatal relationship to the foetus, thus conferring and reinforcing through pregnancy the perception of self as mother. This experience of pregnancy and birth can be as important as the genetic link, with findings that “for some, the inability to gestate and give birth represents a greater loss than the inability to have a child whose genetic complement comprises 50% of their own genes” (Mahowald, 2000), 129). A study comparing embryo donation and adoptive parents found evidence of this feeling; one mother with two children conceived via embryo donation said: “I mean, I’m sure people who adopt children feel the same eventually [...] but when you actually give birth, I’m sure there is a stronger initial bond”(MacCallum, 2009). However this reason is not compelling, for while gestation is incredibly significant for some women, it does not by itself guarantee bonding between mother and child. Even in ‘natural’ conceptions there are occasions when the mother fails to bond immediately with their child. Moreover, the comparison study found that there were no differences in the quality of parent-child relationships between adoptive and embryo donation parents when the children were of preschool age (MacCallum et al., 2007). Thus, while gestation may give the embryo donation mother an initial advantage, it does not follow

³ Equally, it is true to say that without the intention of the surrogate, the child would not exist.

⁴ There are different methods of creating ‘donor embryos’; either they are created using a donor egg and donor sperm or they are ‘donated embryos’ (usually created but then not used by another couple). If the embryos are donated as embryos – rather than created by the commissioning couple from donor egg and sperm – then the force of the intentionality argument is reduced. These embryos did exist prior to the intention of these parents and thus arguably the situation is more similar to adoption.

that adoptive mothers cannot bond as effectively, or that this will have a long-term effect on the parent/child relationship.

The third consequence of the gestational link is social in that it enables the couple to experience pregnancy, birth and childrearing as if they were a 'normal' couple who had conceived 'naturally', and to present it as such to others, with no need to disclose their use of donor treatment. In contrast, adoptive parents would find it difficult to keep private the reasons for the arrival of a child who will already be possibly a year or more in age. More importantly perhaps, the gestational link allows the prospect of not telling the child about the donor conception. In the previously mentioned comparison study, only one-third of the embryo donation mothers had told or planned to tell the child about the donor conception (MacCallum and Golombok, 2007). One of the most common justifications for this non-disclosure was the gestational link, with many subscribing to the views of this embryo donation mother: "You're going to be carrying them for 9 months, you're going to be feeding them for 9 months, to all intents and purposes, you are their mother". In comparison, 80% of the adoptive mothers had told the child about the adoption by the age of 3, and the remainder planned to begin sharing the information with the child soon.

To cite this social consequence as a justification for the disparity would be to assume that keeping the child's genetic origins secret can be desirable. . Although this was the case historically, and donor recipients were encouraged to keep the information private, many years of debate (Daniels and Taylor, 1993; Widdows, 2002) have led to a change in climate towards openness and an acknowledgment of the right of individuals to know their genetic heritage. This is reflected in the policies of several countries, including the UK, which in 2005 changed the law to allow future donor offspring access to identity of the donors at age 18. Since the law is not retrospectively applied, the process of giving the donor information to offspring will not occur until 2023, but when it does it will require careful handling and counselling to involved parties, similar to the care needed when considering contact between adoptees and birth families. From this perspective, the differences between the two processes seem to be diminishing, rendering the social reason even less significant.

Finally, gestation means that embryo donation parents do not have to face the same practical complications as can arise in adoption. The emphasis in contemporary adoption is on finding a "home for a child", with applicants assessed not just on parenting per se, but on providing the right environment for a specific child with an established personality and specific needs. Part of understanding the needs of the child means taking into account the separation from, and relinquishment by, the birth parents, leading to the assumption that adoptive children have a 'significant wound' (albeit one which can heal). To support the child in recovering, and establishing a stable sense of self, adoptive parents "need to be [...] extraordinary parents- with an emphasis on the 'extra'" (Campion, 1995, 38). It has been argued that there are parallels to this 'history of rejection' in embryo donation (Bernstein et al., 1996) with children viewing themselves as rejected by their genetic parent. However, such a comparison seems extreme – placing a child for adoption does not equate to donating an embryo (Widdows and MacCallum 2002). From a practical perspective, adoptive parents have to meet the child's needs and demonstrate very skilled parenting abilities. Embryo donation parents merely have to meet the 'welfare of the child requirements' i.e. not suggest significant risk to a child, since at the time of parent selection their child has no specific needs. As a justification for approaching the two processes in distinct ways, the practical reason is irreducible and equating embryo donation and adoption would not seem to be sensible. This said, it does not follow that it justifies maintaining the *scale* of the current disparity.

The third reason, the technological imperative, is concerned with structural differences in the two procedures, and arises from the way in which they originated, and the nature of their perceptions. Adoption is the oldest form of creating families other than natural

conception. It evolved as a social solution to the problems of housing abandoned and orphaned children and providing heirs for childless couples. Over the last ~150 years, adoption laws have been passed, regulation has been formalised, and social criteria for adoptive parents have been set. By contrast embryo donation is a relatively new procedure which has been implemented as the technology required to perform it has become available, combining the techniques of IVF and gamete donation⁵. Thus, embryo donation is driven by the technological imperative – the assumption that scientific progress is good in itself and should be pursued. As a result, embryo donation and adoption have been conceived of in different ways – one is social and subject to social analysis and criteria and the other ‘medical’, and thus legitimised in a manner similar to other medical procedures. Although this viewpoint accounts for how the disparity in selection criteria has developed, it is explanatory rather than justificatory and does not provide grounds for maintaining the current procedures.

Embryo donation and adoption are not equivalent, particularly taking into account the potentially difficult background of many adopted children, so it seems appropriate to apply different levels of parenting criteria. Evidence on the psychological development of embryo donation children has found that they show no problems during the early and middle childhood years, suggesting that the current system is not having adverse effects (MacCallum and Keeley, 2008). However, from an ethical analysis, the three reasons discussed seem inadequate to support the status quo, and suggest that social factors should have more of a role to play in embryo donation, as they do in adoption, albeit in a proportional manner. This could include preparing and educating embryo donation parents regarding how they deal with the information about the child’s genetic origins. Changing legislation regarding donor anonymity has if anything made the magnitude of the current disparity even less easy to justify ethically. The wider implication is that social criteria should also be applied to other ARTs, and we would agree, but crucially this should be in a proportional way dependent on the similarities between procedures. For example, the possibility of an embryo donation child having a genetic family elsewhere, including full genetic siblings, would result in embryo donation requiring more consideration than egg or sperm donation, where the child retains a genetic connection to one parent. Thus, this conclusion is consistent with the notion of not applying social screening to spontaneous conception where none of these features arise.

DONATION AND THE DISPOSITION DECISION

Of course, embryo donation should not be examined only from the perspective of the recipients, and the question of who should be approved for treatment, but also from the perspective of those who can or do donate embryos, and what drives these decisions. During IVF treatment, the number of embryos transplanted in one cycle is generally limited to two or three, resulting in surplus embryos which can then be cryopreserved. Large numbers of these cryopreserved embryos are stored in laboratories across the world, for example, over 400,000 in the USA alone (Hoffman et al., 2003). Of course, many couples will not be successful in their first IVF cycle, or will desire more children, so use their stored embryos in subsequent treatments. The period of time for which storage is permitted is often limited by legislation. Once this limit is reached, or prior to that if the couple have completed their family or decided not to pursue further treatment, they have to decide how their embryos should be utilised with three potential options: allow embryos to thaw and discard, donate to another infertile couple, or donate to medical research. There is also a fourth ‘option’ which is to refuse to decide and simply to fail to respond to the letter or inquires about what you wish to do with embryos; an option which many find attractive. Although exact percentages differ, it is consistently found that few couples are actually willing to donate their embryos to others

⁵ Embryos become available for donation in two ways: they are donated by couples or single women who have undergone IVF, or are created specifically for the recipient couple using donor egg and sperm.

even when stating support for donation in principle (Newton et al., 2003), and indeed that a higher proportion of couples prefer their embryos to be discarded than donated (Darlington and Matson, 1999). To what extent is the difficult decision of what to do with supernumerary embryos influenced by ethical considerations?

From an ethical perspective, one key issue identified in analysing embryo disposition is the moral status of the embryo, and thus the respect with which it should be treated. Those who maintain that personhood or moral status begins at fertilisation, such as the Catholic Church, believe that the embryo should be regarded as a human being and treated as such. The opposite point of view is that embryos are like property, the ownership of which can be transferred. Currently the legal position in the large majority of jurisdictions is in the middle, treating embryos as somewhere between ‘person’ and ‘property’. The consensus among those involved in assisted reproduction is in line with this, in that practitioners should be seen as ‘showing respect’ for the embryo, e.g. by not unnecessarily creating or manipulating embryos (ESHRE Task Force on Ethics and Law, 2001) but not the same level of respect as is shown to actual persons. As a result, most countries limit research on embryos to the time period up to 14 days after creation (when fetal tissue differentiation commences), and to situations where there is no viable alternative research object (they do, however, also allow the discarding of embryos which could be seen as not ‘respectful’). The question then arises as to how potential donors view their embryos, and whether their perception of the embryo’s status and nature play a major factor in their decision-making.

One might assume that viewing embryos as ‘persons’ or potential persons would make donation a more attractive proposition than allowing embryos to be discarded and thus wasting potential life. Interestingly, the opposite pattern is seen. Mohler-Kuo and colleagues (2009) administered questionnaires about disposition to IVF patients with cryopreserved embryos in Switzerland where donation to other couples is currently not legal. The strongest correlate of disposition preferences was the couples’ position on the moral status of embryo. Of the roughly 900 participants, 89% felt that the embryo deserved some respect, and half felt that the rights accorded to the embryo should be the same as to a human being. Importantly, those who equated the embryo’s rights with those of a human being were less likely to be in favour of donation to other couples (Mohler-Kuo et al., 2009). Similar findings regarding the symbolic nature of the embryo were reported by de Lacey’s qualitative study of IV patients who had discarded unused embryos. Many reported thinking before treatment that they would donate the resulting embryos, but that parenthood had changed how they viewed the embryos, attributing to them a personhood (de Lacey, 2005). As a consequence, donation which had previously been seen as a positive step to help others achieve pregnancy, became more akin to giving up a child for adoption. De Lacey expanded on this by comparing IVF patients who had discarded embryos with those who had donated embryos (de Lacey, 2007). For the ‘Discard’ group, embryo donation was again paralleled with relinquishing a child for adoption, whereas discarding was viewed as more natural, like miscarriage. The ‘Donate’ group on the other hand viewed embryos as the ‘seed’ for potential life but not as children, so donation preserved this potential while discarding an embryo was compared to pregnancy termination. This highlights the paradox that those who view their embryos as more ‘child-like’ in status and nature are in fact more likely to discard them.

Therefore, the definition and moral conception of the embryo does seem to have some influence on couples’ disposition decisions. However, Lyerly et al. (2006) found that this is not the whole story. Their participants considered the nature of the embryo, but placed more importance on their responsibility to their own embryos, than on the abstract moral status (Lyerly et al., 2006). Disposition decisions were affected more by personal values, such as feelings about what family means, than by the ethical question of the ‘rights’ of the embryo. Qualitative interviews of Belgian IVF patients support this view (Provoost et al., 2009), where the most significant finding was that participants who perceived the embryo as being

highly symbolic of the relationship between the couple were very reluctant to donate their cryopreserved embryos to others. Conceptualising the embryo in this way is more likely to occur when the embryo has been created from the couples' own gametes than when donor eggs or sperm have been used, or the embryo has already been donated from another couple. Therefore, couples with their own genetic embryos may be less inclined to donate them since the personal symbolism of the embryos influences their decision more than the moral status of the embryo *per se*.

Due to the complex nature of the disposition decision, many couples find it intensely difficult to come to a resolution (hence the numbers of couple who take the 'fourth' option of simply refusing to make a decision). Combined with the requirement for clinicians and others to show 'respect' for embryos, this can give rise to ethical dilemmas. Over 70% of couples have not made a definite decision about their embryos, even four or five years after their last IVF treatment (Nachtigall et al., 2005). Many couples seem to actually actively avoid the decision by not keeping in contact with the clinic. The dilemma occurs when the storage limit is reached, if the couples' decision has not been recorded. Embryos can become 'blocked' in clinics if consideration of the status of the embryo leads to unwillingness to destroy them without explicit instructions. One Spanish clinic has caused controversy by allowing donation to other couples of embryos where disposition decisions have not been made (Blackburn-Starza, 2010), without the donors' permission, which flies in the face of the principle of 'fully informed consent' and does not seem to equate with treating embryos with respect (this is further evidence for the potential problems of medical tourism discussed below). In the UK, clinics may store embryos for a maximum of 10 years, after which they should be discarded or donated according to decisions made by the patients at the outset, i.e., before they know the treatment outcome, although patients can change their minds during the storage period. Since attitudes toward donation can change particularly with experience of parenthood (de Lacey, 2005), a decision made before treatment may be considered not to be 'fully informed', and revisiting this decision at regular intervals should be strongly encouraged. Although many clinics report waiting lists for embryo donation treatment due to a lack of willing donors, couples must be able to make decisions about their embryos freely, without coercion, and in possession of all the relevant facts.

In addition to these issues there are additional concerns when 'donors' (or middle men) sell embryos or eggs. Increasingly, British women and couples are travelling (often to Spain) in order to attain cheaper treatment and to avoid the anonymity laws of the UK. Couples then purchase eggs from vendors; usually the sources are Spanish women or Eastern European women. Embryo sale (or egg sale to create embryos) raises many additional and complex issues which do not apply in donation. Some of these ethical concerns will be addressed towards the end of the paper.

COMMERCIALIZATION

The final issue we wish to address is not just concerned with donors, although perhaps most relates to them. It is the question of whether increasing use of ARTs is likely to further commodify children – in other words to push them to the 'property' end of the person/property spectrum. This is clearly not just a problem for embryo donation but for all ARTs, however, it could be argued that embryo donation is potentially more commodifying than other ARTs in that both gametes come from donors, whether as a couple donating an embryo, or two separate egg and sperm donors, and therefore there is more potential to turn the embryo into a 'product' where certain 'parts' or 'traits' are selected. This is particularly ethically concerning when donors are chosen not to overcome infertility, or for health reasons (i.e. to avoid X-linked disorders) but to have a child of a different 'type'. Such practices are rare, but not unknown.

ARTs, are usually perceived in a relatively benign manner (by users of the technology and the wider public); in part because the results are valued by individuals and society.⁶ One result of this acceptance is that the broader cultural and social consequences of ARTs are under-theorised and under-researched. In particular there is little research done into changing understanding of children and whether increased use of these technologies changes expectations of children and parenting in general. In other words, are there cultural and social effects which extend beyond the communities who use these technologies to general understandings of children?

Such incremental changes which develop as new technology becomes available and normalised would not be surprising – as our discussion of the technological imperative has shown. Increased use and awareness of ‘new’ procedures gradually normalises them and makes them familiar and less ‘new’. This happens in a progressive way, one procedure or technology after another. Indeed, a recent report suggests that ARTs could become the routine method of conception for older couples, overtaking sexual conception within a decade (Vatja et al, 2010). It is not hard to imagine that the increasing use of such technologies gradually normalises them to the point where the ‘technical fix’, and all the options and choices this offers parents pre-birth, becomes regarded as a standard conception option. Such uses of the technologies as valid options for all in order to choose traits, characteristics or parts of the resulting child is a very different scenario from using the technology in order to have ‘one’s own’ child (the way ARTs are currently usually considered). In such a scenario, technologies of reproduction do not mimic natural conception and merely replicate the ‘normal’ conception process but offer new reproductive possibilities and thus potentially change the ethos of reproduction and have cumulative social effects. In terms of this issue they might move us further along the spectrum from person to property or from ‘gift’ to ‘contract’ and so result in a more commodified view of children. Worries about the change from ‘gift’ to ‘contract’ feed into larger debates in bioethics and are particularly important at the current time in terms of organ sale as well as gamete sale. Early work on this topic, most particularly the classic study of blood donation by Richard Titmuss, highlights that the benefits of the gift relationship extend to significant public goods and social capital. (Titmuss, 1970). Moreover, the ‘altruistic’ market not only brings significant goods but is also more effective in terms of delivering, in this instance, good quality blood in the necessary quantities than a commodity market. Given this, many argue that what we should be doing before permitting sale is exploring every possibly way of encouraging an altruistic market, which if the blood parallel holds, may well deliver more and better quality gametes as well as stop the risk of commodifying the children produced by these technologies. At its most simple, commodification means turning a person into an object or a thing, about which the language of ownership and property can be used and, significantly, into objects which can be bought and sold.⁷ Eggs, gametes and embryos fit this definition in jurisdictions where their sale is legal, but not in jurisdictions where altruistic donation is the model (as in the UK, although the HFEA is currently reconsidering payment to donors). One reason given for not allowing ‘sale’ even when ‘expenses’ are permitted is because it alters the status of gamete and changes the relationship between the mother and the gametes from one of recipient to one of purchaser. Children are not ‘things’ (although some still regard surrogacy as ‘baby-selling’) however, they can be treated as things and the relationships with parents can change accordingly. Radin’s broad definition which “includes *not only actual buying and selling, but also market rhetoric, the practice of thinking about interactions as if they were sale transactions*” (Radin, 1987, 1859) encompasses much of what is of concern here. Key features of ‘commodification’ are, first, objectification occurs, persons become things onto

⁶ For a more expansive version of this argument see Widdows (2009).

⁷ A narrow understanding of commodification, defined by Radin as the “*actual buying and selling (or legally permitted buying and selling) of something*” (Radin, 1987, 1859)

which desires can be projected, and second, contract and sale become the framework of the relationship. These are not insignificant particularly when one thinks about the high costs involved and what couples and women sacrifice to avail themselves of such technologies.

Clearly the risks of commodification are less in embryo donation when it is used simply to have a child, or for health reasons. Certainly it is less problematic than when a type of child is chosen, for instance a deaf child, a 'saviour sibling' or a child of a certain sex for non-medical reasons.⁸ In the more extreme end, parents are selecting gametes to create embryos in an attempt to influence intelligence and appearance. It is now possible to purchase gametes from a website exclusively limited to attractive people if one is seeking a beautiful girl and from intellectually successful donors if one is seeking a clever boy (the up-take suggests that it is this combination that is sought).⁹ Thus, while not mainstream, ARTs are already being used not to ensure a healthy child or a genetically related child but a particular type of child or a child with particular characteristics.

In all these instances the essential worry is the same: that as expectations are increased regarding what types of child can be created if the resulting child is not the way the parents expect will they be disappointed in a way that pre-ARTs they would not be? In other words does the ability to choose – to technologically fix – particular parts of children or types of children, in this case to choose deafness or sex, change our expectations of children and commodify them? Does it make them more 'product' than person?

To suggest that we move from person to something which can be commodified is more or less likely depending on the technology and the motive for using it. For instance if one is using ARTs simply to experience as near as possible to one's own child, then charges of commodification are weakened. If one is seeking to have a child of a particular type or a child with certain characteristics, then they are strengthened. There are many reasons for having a certain 'type' of child; the least controversial are for health reasons, for instance to avoid a genetic disorder. In such instances, although there might be some general risk that the increased use of such technologies normalises intervention per se, as long as the intervention is only to have a healthy child then the risk of commodity seems small.

However, if we pay for certain characteristics, what happens to children who do not meet them? There are instances where children have been refused in surrogacy when the resulting child was disabled, or even because they were twins rather than the requested singleton (Taylor, 2001). In this case it does seem that at least some element of commodification is at work. It may be that the gestational experience mitigates this element, and that those who carry their ART-conceived child through pregnancy will be less likely to be disappointed with any result. Gestation though, as discussed earlier, while important to some is less so to others.

Concerns about commodification are compounded when we consider trade in gametes and embryos to be global. The term 'medical tourism' is used to define the movement of people from one legislative area to another to obtain treatment and procedures which are not

⁸ Some deaf couples have argued they should be able to choose a child for social and cultural reasons not for medical reasons. Parents argue that "deafness is not a disability but a culture which they should be permitted to pass on" (Häyry, 2004, 510) with "distinct language, activities, and institutions of that culture" (Anstey, 2002, 287). Saviour siblings are created as a 'match' for an earlier child. In other words they are 'designed' specifically to be a donor (although it may be the umbilical cord which is actually used) (Sheldon and Wilkinson, 2004).

⁹ Beautifulpeople.com, which is primarily a dating website only for those rated as attractive, announced it was setting up a 'virtual egg and sperm bank', open to all purchasers. The site founder stated that "everyone, including ugly people, would like to bring good-looking children into the world".

available (or less easily available) within the country or state of their origin.¹⁰ Medical tourism includes ‘reproductive tourism’. Reproductive tourism denotes practices such as Irish women travelling to the UK for abortions; German couples travelling to Belgium for Pre-Implantation Genetic Diagnosis (PGD); and, women travelling from Northern Europe and the US to Eastern Europe, Spain and Greece for donor eggs for reproductive treatments or to India for ‘surrogacy services’. Medical tourism is an important ethical issue because it is a market in which the relative rich take advantage of the relatively poor. If there were not global inequities of wealth and differences in laws and standards in different jurisdictions, medical tourism would be impossible. Accordingly there are possibilities of coercion and exploitation for both vendors and purchasers/donors and recipients, as reflected in the example above of donation without express consent in one Spanish clinic.

However, the term medical tourism, does not take seriously the importance of the process for either side. The market for reproductive tourism – where richer women buy eggs and embryos from poorer, younger, more needy women – has increased over the last decade to the point of normalisation. It is perfectly common for women from Western Europe, particularly the UK and Northern Europe to travel to Spain or Eastern Europe for ‘treatment’.¹¹ Women travel for different reasons, for some it is for cheaper treatment or to attain procedures which are illegal in the home country.¹² A small number of UK couples travelling abroad for treatment cited a desire to use anonymous donors (BioNews, 2010), raising concerns about equity for the offspring who will not have the rights to donor identity now granted to those conceived in the UK. Prices paid for eggs differ; Spanish students are paid 600 euros, while US women are paid \$6000-\$10000 (Gupta, 2006), and Romanian women who donate in their own country are paid around \$200 to \$250. At the lower end of the market, there are issues about exploitation and coercion of donors which are ethically important. For instance, in one study it was reported that Romanian women who sold their eggs were paid a fraction of the price that the resulting embryos were sold for in Spanish clinics. Moreover, they returned for numerous harvestings, with all the risks to fertility and health this entails, simply to attain a living wage (Beeson and Lippman, 2006). Commodification therefore is an issue for donors, recipients and for society more broadly.

If commodification and the wider trade in gametes, suggested by practices of reproductive tourism, are of ethical concern then we should beware of an uncritical expansion of ARTs, perhaps particularly embryo donation. In particular we should beware of allowing parental preference to dominate to the extent where selection of parts or types of children are normalised. In order to ensure that such practices do not become more prevalent and ultimately result in a collectively more commodified attitude not only to particular children but to all children. Accordingly, it is ethically important what type of ARTs are being practiced and how they are regulated. It is not the technology which is ethically right or wrong but how it is used and the type of family dynamics it creates.

CONCLUSION

We first considered the ethical issues relating to embryo donation in 2002, when we surmised that there were not grounds sufficient to justify the extreme disparities in parenting criteria between this process and adoption. Revisiting this analysis, the same conclusions apply, and in fact the shift in attitudes and legislation towards openness about children’s genetic origins

¹⁰ This issue is the focus of chapter 8 in this volume, on “Transnational donation”. For the purposes of the current chapter, what is key is the travelling between different jurisdictions where laws which are different from the laws in the home country apply, as well as the issue of ‘paying’ for the components of one’s future child.

¹¹ Gupta cites that “Dutch infertile women are travelling to Spain for eggs donated by University students” (Gupta, 2006, 31).

¹² Costs of treatment differ in different countries, hence fertility specialists are establishing clinics in cheaper countries; “for example, private IVF centres in Russia, Portugal and Spain have been established by Finnish fertility specialists (Blyth and Farrand, citing Aarnio, 2005, 102).

has created more similarities between the two processes, weakening the reasons for the disparity still further. Whilst not advocating implementing the same procedure for both, we would suggest that there should be consistency in whose interests are taken into account and the mechanisms used to do so. Thus, we argue for various levels of parenting criteria proportional to the similarities between procedures.

This conclusion is further supported by the additional discussions regarding donor perspectives and concerns about the growing global trade in sperm, eggs and embryos which raise issues about commercialisation and commodification. The uneasiness that donors experience with regard to donating their 'spare embryos' shows that there is something ethically significant at stake here. What is being donated has meaning for them and is connected to them; just as it is for the Romanian vendors. This suggests that gametes are not products like any others to be bought and sold; at least not without robust criteria, including social criteria, to help all parties negotiate the psychological, emotional and ethical aspects of these procedures.

Finally, and perhaps most importantly, insisting on some social criteria – however minimal – will give at least a modicum of recognition to the rights and interests of the children who are the products of the procedure. The comparison with adoption shows clearly just how much the interests of the future child (and adult) are neglected in debates about ARTs. While, as we have pointed out, there are good reasons for giving the future child less attention in embryo donation than in adoption, there are no good reasons for ignoring the interests of the future child all together. The 'right of the future child' to know their genetic origins underpins the changes to anonymity of the practice. These rights are being systematically violated if couples are permitted to travel in order to attain embryos from anonymous donors. Likewise, concerns about commodification and commercialisation are not just about the rights of donors. If knowing 'one's story' is important – as is presumed in adoption and in ART practices which rely on identifiable donors – then it matters what this story is. For instance, is it not as potentially damaging for a person to discover their gametes were purchased from an exploited vendor as to discover they were 'rejected' by their birth parents? In regulating such issues, the silent voice of the future child should be taken into consideration, as well as the loud voices of recipients and the somewhat quieter voices of donors and vendors.

References

- (1993) Johnson v. Calvert, *P2d*. California Supreme Court.
- (1998) In re. Marriage of Buzzancz, *Rptr2d*. Cal.
- Anstey K W (2002) Are attempts to have impaired children justifiable? *Journal of Medical Ethics*, 28, 286-288
- Bernstein, J., Berson, A., Brill, M., Cooper, S., Ferber, G., Glazer, E., Kaufman, A., Levin, S., Lynn, S., Silverstein, D. et al. (1996) Safeguards in embryo donation. *Fertility and Sterility*, 65, 1262-1263.
- Beeson, D. and Lippman, A. (2006) Egg harvesting for stem cell research: Medical risks and ethical problems. *Reproductive BioMedicine Online*, 13, 573-579.
- Blackburn-Starza, A. (2010) Spanish clinic allows IVF embryo donation 'without consent'. *BioNews*. http://www.bionews.org.uk/page_67168.asp.
- Campion, M. J. (1995) *Who's fit to be a parent?*, Routledge, London.
- Blyth, and Farrand, , (2005) Reproductive tourism – a price worth paying for reproductive autonomy? *Critical Social Policy*, 25, 91-114
- Daniels, K. and Taylor, K. (1993) Secrecy and openness in donor insemination. *Politics and Life Sciences*, 12, 155-170.

- Darlington, N. and Matson, P. (1999) The fate of cryopreserved human embryos approaching their legal limit of storage within a West Australian in-vitro fertilization clinic. *Human Reproduction*, 14, 2343-2344.
- de Lacey, S. (2005) Parent identity and 'virtual' children: why patients discard rather than donate unused embryos. *Human Reproduction*, 20, 1661-1669.
- de Lacey, S. (2007) Decisions for the fate of frozen embryos: Fresh insights into patients' thinking and their rationales for donating or discarding embryos. *Human Reproduction*, 22, 1751-1758.
- Douglas, G. (1994) The Intention to be a Parent and the Making of Mothers. *Modern Law Review*, 57, 636-641.
- ESHRE Task Force on Ethics and Law (2001) I. The moral status of the pre-implantation embryo. *Human Reproduction*, 16, 1046-1048.
- (2008) *The Human Fertilisation and Embryology Act 2008*. HMSO, London.
- Gupta, J. (2006) Towards Transnational Feminisms: Some reflections and concerns in relation to the Globalisation of Reproductive Technologies. *European Women's Studies*, 13, 23-38
- Häyry, M. (2004) There is a difference between selecting a deaf embryo and deafening a hearing child. *Journal of Medical Ethics*, 30, 510-512
- Hoffman, D. I., Zellman, G. L., Fair, C. C., Mayer, J. F., Zeitz, J. G., Gibbons, W. E. and Turner, T. G. (2003) Cryopreserved embryos in the United States and their availability for research. *Fertility and Sterility*, 79, 1063-1069.
- Lyerly, A. D., Steinhäuser, K., Namey, E., Tulsky, J. A., Cook-Deegan, R., Sugarman, J., Walmer, D., Fader, R. and Wallach, E. (2006) Factors that affect infertility patients' decisions about disposition of frozen embryos. *Fertility and Sterility*, 85, 1623-1630.
- MacCallum, F. (2009) Embryo donation parents' attitudes towards donors: Comparison with adoption. *Human Reproduction*, 25, 517-523.
- MacCallum, F. and Golombok, S. (2007) Embryo donation families: Mothers' decisions regarding disclosure of donor conception. *Human Reproduction*, 22, 2888-2895.
- MacCallum, F., Golombok, S. and Brinsden, P. (2007) Parenting and child development in families with a child conceived by embryo donation. *Journal of Family Psychology*, 21, 278-287.
- MacCallum, F. and Keeley, S. (2008) Embryo donation families: A follow-up in middle childhood. *Journal of Family Psychology*, 22, 799-808.
- Mahowald, M. B. (2000) *Genes, women and equality*. Oxford University Press, Oxford.
- Mohler-Kuo, M., Zellweger, U., Duran, A., Hohl, M., Gutzwiller, F. and Mutsch, M. (2009) Attitudes of couples towards the destination of surplus embryos: results among couples with cryopreserved embryos in Switzerland. *Human Reproduction*, 24, 1930-1938.
- Nachtigall, R., Becker, G., Friese, C., Butler, A. and MacDougall, K. (2005) Parents' conceptualization of their frozen embryos complicates the disposition decision. *Fertility and Sterility*, 84, 431-435.
- Newton, C. R., McDermid, A., Tekpety, F. and Tummon, I. S. (2003) Embryo donation: attitudes toward donation procedures and factors predicting willingness to donate. *Human Reproduction*, 18, 878-884.
- Provoost, V., Pennings, G., de Sutter, P., Gerris, J., van de Velde, A., de Lissnyder, E. and Dhont, M. (2009) Infertility patients' beliefs about their embryos and their disposition preferences. *Human Reproduction*, 24, 896-905.
- Radin, M. (1987) Market-Inalienability. *Harvard Law Review*, 100, 1849-1937.
- Sheldon, S. and Wilkinson, S. (2004) Should selecting saviour siblings be banned? *Journal of Medical Ethics*, 30, 533-537
- Taylor, C. (2001) *One Baby Too Many*, TIME, San Francisco.
- Titmuss, R.M. (1970) *The Gift Relationship*. George Allen and Unwin: London.

- Trounson, A., Leeton, J., Besanka, M., Wood, C. and Conti, A. (1983) Pregnancy established in an infertile patient after transfer of a donated embryo fertilized in vitro. *British Medical Journal*, 286, 835-838.
- Vatja, G., Rienzi, L., Cobo, A., and Yovich, J. (2010) Embryo culture: Can we perform better than nature? *Reproductive Biomedicine Online*, 20, 453-369.
- Widdows, H. (2009) Persons and their parts: New reproductive technologies and risks of commodification *Health Care Analysis* 17, 36-46
- Widdows, H. (2002) The ethics of secrecy in donor insemination. In Dickenson, D. (ed), *Ethical issues in maternal-fetal medicine*. Cambridge University Press, Cambridge.
- Widdows, H. and MacCallum, F. (2002) Disparities in parenting criteria: An exploration of the issues, focusing on adoption and embryo donation. *Journal of Medical Ethics*, 28, 139-142.