Comparative assessment of pre- and post-donation attitudes towards potential oocyte and embryo disposition and management among ovum donors in an oocyte donation programme

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BACKGROUND: In anonymous oocyte donation programmes, the disposition of retrieved oocytes and subsequent embryo management are at the discretion of the IVF programme and the oocyte recipients, as donors waive all rights following their donation. Nonetheless, donors are routinely made aware of ways in which oocytes and resulting embryos may be used and elect to proceed with the process even in the presence of reservations to some clinical scenarios before their donation. The aim of our study was to examine oocyte donors’ attitudes to oocyte and embryo disposition and management and how initial reservations change over the course of the donation process. METHODS: Oocyte donors in a university-based IVF programme were asked about their willingness to donate in relation to various clinical scenarios during the initial screening interview and at the post-donation exit interview. Results were tabulated as ‘yes’ or ‘no’. RESULTS: At the pre-donation interview, 72% of donor candidates expressed reservations to one or more clinical scenarios. More reservations were expressed at the post-donation interview compared with the pre-donation interview. The greatest reservations were donating to recipients >50 years of age (P < 0.05). Despite this, 97% of donors were willing to donate again. CONCLUSION: Oocyte donors’ attitudes towards various clinical scenarios changed following their donation, reflecting overall greater reservations following the donation process. Although speculative, donors may be more willing to assert their opinions or donor attitudes become more restrictive.

Key words: oocyte donor attitudes/oocyte disposition

Introduction
The American Society for Reproductive Medicine (ASRM) recommends that IVF programmes select adequate oocyte donor candidates with a screening process that includes medical evaluations, sexually transmitted disease and genetic screening and a psychological assessment (American Society for Reproductive Medicine, 2002a,b). The psychological assessment should evaluate for evidence of coercion (financial or emotional) and is intended to ensure that the donor is made aware of all relevant aspects of medical treatments. The ASRM also states that candidates should be made aware of all aspects of potential oocyte/embryo management and disposition applicable to that practice.

We have previously reported that after learning about potential oocyte and embryo disposition, up to 10% of donor candidates had significant enough reservations to drop out of the donation process. As a result, this line of questioning has become a routine part of pre-donation screening and information procedures, in addition to other risk information, in an attempt to identify those who may not be ideal donor candidates. Interestingly, we have also found that, after learning about potential clinical scenarios for donated oocytes and embryos, up to 60% of potential donors expressed some reservations, yet still wished to proceed with the screening process (Adsuar et al., 2003).

Follow-up studies have revealed that donors are typically satisfied with the overall process, though suggestions to improve satisfaction include minimizing trips to the clinic, limiting i.m. shots, reimbursing expenses and separating those reimbursements from income to decrease taxable income, treating donors with respect and appreciation and providing follow-up and outcome information (Kalfoglou and Gittelsohn, 2000). Some have attempted to predict post-donation satisfaction, finding a negative correlation with pre-donation financial motivation (r = –0.48, P < 0.01) and pre-donation ambivalence (r = –0.84, P < 0.0001) (Klock et al., 1998, 2003). Although
donors appear to be satisfied with the overall process, it remains unclear whether they are initially and ultimately comfortable with oocyte and embryo management and disposition.

Nonetheless, a significant number of donors participate in the donation process, despite reporting reservations about oocytes’ and embryos’ ultimate disposition and management. Thus, we examined whether these reservations changed following the donation process and whether it impacted donor satisfaction and willingness to proceed with the process again.

**Materials and methods**

Participants were 32 oocyte donors in a university-based IVF programme, who underwent pre- and post-donation screening between 1 July 2001 and 1 September 2003. The sample was composed of 27 Caucasian, 3 African American and 2 Asian participants. Eight (25%) of the participants were married, and the rest were single. The mean age of participants was 26.3 ± 3.5 years (SD) (range of 20–33), mean gravidity was 0.8 ± 1.1 (range of 0–4) and mean parity was 0.4 ± 0.8 (range of 0–2).

Participants were recruited for oocyte donation through advertisements in local newspapers, directed at women aged 20–33, offering $5000 compensation upon completion of the programme. Recruitment and screening policies and procedures followed previously established guidelines and recommendations (Lindheim et al., 1998). Potential participants who responded to the advertisement spoke with the donor nurse co-ordinator, who gave a general review of the principles of oocyte donation, the use of parenteral medications, time commitment, potential risks of the process and the required screening process.

Donor candidates then completed an in-house medical questionnaire and nurse screening, where they were queried about medical, surgical, gynaecologic, obstetrical, family and social history. The nurse coordinator then conducted an assessment of the donor candidate’s personal characteristics, motivation and probable compliance for the programme. Candidates also received an information pack about the donation process.

If candidates displayed adequate characteristics for donation, they were invited for a personal interview with the medical director, who reviewed aspects of the donation such as indications, legal and ethical issues (including the knowledge that the oocyte donor had no say to whom their oocytes were given, commitments or obligations as a result of the donation process), medications, time commitment, risks and required screening tests for donors and recipients. A review of the donor’s medical background and history was also performed.

At the completion of the interview, the medical director spoke with the potential donor about oocyte/embryo disposition and management and discussed possible clinical case scenarios. Donors were then asked to respond with ‘yes’ or ‘no’ on whether they would be willing to donate for each scenario: women <40 years old, women 40–49 years old, women 50–55 years old, women >55 years old, single women, cross-ethnic donation, lesbian couples, male couples using a father or brother as sperm donor and discussed possible clinical case scenarios. Donors were then asked whether they believed that their views of oocyte/embryo disposition and management had changed following the donation. Donors were additionally asked whether they were satisfied with their donation experience, how they would improve the process and whether they would be willing to participate in future cycles.

Comparisons between initial and follow-up responses were performed using McNemar’s test for discordant pairs. Using Fisher’s exact test, initial and follow-up responses of patients with initial reservations were compared with those of patients without initial reservations. Significance was defined as *P* < 0.05.

**Results**

In the pre-donation screening, 72% (*n* = 23) of the donors expressed reservations to at least one clinical scenario but were still willing to participate in the programme, while 28% (*n* = 9) conveyed no reservations to any of the clinical scenarios. The age, gravidity and parity were similar for those with [26.7 ± 0.75 (range 21–30), 0.8 ± 0.3 and 0.4 ± 0.2, respectively] and without reservations [25.2 ± 1.1 (range 21–30), 0.8 ± 0.4 and 0.4 ± 0.3, respectively]. The ethnic distribution was similar between groups.

Table 1 summarizes the percentage of donors willing to donate to each of the clinical scenarios. Overall, 84% of donors were still willing to participate in the programme knowing that oocytes and embryos could be directed to any of the discussed scenarios. With full disclosure of these possible clinical scenarios, donor candidates were given the option to withdraw from the donation programme.

Donor candidates were then assessed by the programme’s psychologist. This included an evaluation of individual and family mental health history, stability, coercion and motivation for donation. Emotional and ethical issues associated with oocyte donation were also discussed. If approved, participants were registered for the donation pool.

Upon completion of a donation cycle and following the donor’s next menstrual cycle, an exit examination and interview were conducted by the medical director. The interview included the same pre-donation questioning about oocyte and embryo disposition and management. Specifically, donors were again asked their acceptance of the clinical case scenarios. Responses were tabulated as ‘yes’ or ‘no’.

Donors were also asked whether they believed that their views of oocyte/embryo disposition and management had changed following the donation. Donors were additionally asked whether they were satisfied with their donation experience, how they would improve the process and whether they would be willing to participate in future cycles.

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**Table 1. Percentage of donors stating ‘yes’ to clinical scenario(s)**

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Initial interview</th>
<th>Exit interview</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;40 years (<em>n</em> = 32/<em>n</em> = 31)</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>40–49 years (<em>n</em> = 32/<em>n</em> = 31)</td>
<td>100</td>
<td>94</td>
</tr>
<tr>
<td>50–55 years (<em>n</em> = 32/<em>n</em> = 30)</td>
<td>97*</td>
<td>67</td>
</tr>
<tr>
<td>&gt;55 years (<em>n</em> = 32/<em>n</em> = 30)</td>
<td>81*</td>
<td>47</td>
</tr>
<tr>
<td>Single (<em>n</em> = 32/<em>n</em> = 32)</td>
<td>100</td>
<td>97</td>
</tr>
<tr>
<td>Cross cultural (<em>n</em> = 32/<em>n</em> = 32)</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Same-sex partner (female) (<em>n</em> = 32/<em>n</em> = 32)</td>
<td>100</td>
<td>88</td>
</tr>
<tr>
<td>Same-sex partner (male) (<em>n</em> = 32/<em>n</em> = 31)</td>
<td>97</td>
<td>90</td>
</tr>
<tr>
<td>Posthumous reproduction (<em>n</em> = 31/<em>n</em> = 21)</td>
<td>97*</td>
<td>76</td>
</tr>
<tr>
<td>Family member as sperm donor (<em>n</em> = 32/<em>n</em> = 32)</td>
<td>91</td>
<td>72</td>
</tr>
<tr>
<td>HIV+ female (<em>n</em> = 31/<em>n</em> = 30)</td>
<td>55</td>
<td>33</td>
</tr>
<tr>
<td>HIV+ male (<em>n</em> = 31/<em>n</em> = 30)</td>
<td>65</td>
<td>43</td>
</tr>
<tr>
<td>Physically handicapped (<em>n</em> = 32/<em>n</em> = 30)</td>
<td>94</td>
<td>90</td>
</tr>
<tr>
<td>Mentally handicapped (<em>n</em> = 32/<em>n</em> = 28)</td>
<td>69</td>
<td>50</td>
</tr>
<tr>
<td>Split cycles (<em>n</em> = 32/<em>n</em> = 32)</td>
<td>97</td>
<td>94</td>
</tr>
<tr>
<td>Embryo donation (<em>n</em> = 32/<em>n</em> = 32)</td>
<td>88</td>
<td>87</td>
</tr>
</tbody>
</table>

* *P* < 0.05. HIV, human immunodeficiency virus.

The number of participants providing responses at the pre-donation interview/ post-donation interview is listed under each specific scenario.
changed at least one view from pre- to post-donation. Forty-one percent acknowledged this change, and 43% did not. Most of these response changes (86%) went from a pre-donation ‘yes’ to a post-donation ‘no’.

While donors were generally more reluctant to donate to each of the clinical scenarios, significantly fewer were willing to donate to women aged 50–55 (97% expressed willingness at pre-donation versus 67% at post-donation, \( P < 0.05 \)), to women over 55 (81% pre-donation versus 47% post-donation, \( P < 0.05 \)) and to those using a deceased partner’s sperm (posthumous reproduction) (97% pre-donation versus 76% post-donation, \( P < 0.05 \)).

Those donors who initially expressed reservations (\( n = 23 \)) were significantly more reluctant to donate to women 50–55 years of age (100% expressed willingness at pre-donation versus 67% at post-donation, \( P < 0.05 \)) and to women over 55 (87% pre-donation versus 52% post-donation, \( P < 0.05 \)). Those donors without initial reservations (\( n = 9 \)) demonstrated similar trends; however, these changes did not reach statistical significance. Overall, 31 of the 32 donors (97%) were willing to donate again.

Discussion

Regarding oocyte/embryo disposition and management, donors’ views varied across the pre- and post-donation interviews, with a trend towards more restrictive attitudes emerging at post-donation. These restrictive attitudes were seen both in donors who expressed initial reservations and in those who did not, though failed to achieve statistical significance, most likely due to the small sample size.

Other researchers have noted that, as donors become more knowledgeable and experienced with the donation process, they may become more comfortable in asserting their own attitudes (Kalfoglou and Geller, 2000). Although we agree that assertiveness may increase over repeated donation, we also contend that attitudes may change as well (Kalfoglou and Geller, 2000). It may be that before donation, the donor has a difficult time fully conceptualizing the implications of her donation. To some extent, she may be denying to herself that a child, or children, may result from her donation. The clinical procedures that are a part of oocyte donation may have the effect of increasing the reality of the situation for the donor. A donor may then appreciate more fully the fact that a child or children may result from her donation. She may then feel an increased need to assure that her oocytes, and the resulting children, go to parents that she finds acceptable. Hence, her attitudes may become more restrictive.

When a programme views the donor as a patient, rather than simply a donor, it becomes a necessary component of care to understand and respond to their attitudes and experiences as a donor. This study has demonstrated that donor attitudes become more restrictive across the process of donation. To further our understanding of the changes in donor attitudes and their experience, we plan to survey each donor’s level of connection to her oocytes through a series of structured questions that will be repeated at set points across the donation process. We anticipate that such a survey will elucidate factors in the thought process and emotional experience of each donor, which in turn should provide information to help us prepare future donors for their donation experience.

In conclusion, this study demonstrated that donors’ attitudes towards various clinical scenarios differed following the oocyte donation process, with views trending towards more restrictive attitudes at post-donation. This restrictive trend may reflect that donors are more willing to assert their opinions following their donation. Alternatively, it may reflect that the views themselves have become more conservative over the course of the donation process. Future research will attempt to examine the timing and nature of these attitude changes.

References


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