

## Legal and ethical issues in the international transaction of donor sperm and eggs

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**Abstract** Pertinent ethical and legal issues in the international transaction of donor sperm and eggs are discussed. Firstly, there may be legislative and ethical “contradiction” by the local health authority in permitting import of donor gametes, due to varying policies on donor reimbursement in different countries. This is particularly significant in countries where the underlying principle of gamete donation is altruistic motivation, and where reimbursement is given only for direct “out-of-pocket” expenses i.e. traveling costs. Secondly, there is a lack of clear and coherent internationally-binding legislation and regulatory guidelines overseeing the exchange of donor gametes across international borders. In particular, provisions should be made for donor traceability if gametes are sourced from abroad. Thirdly, in the case of “frozen-egg donation” from abroad, patients must rightfully be informed that current cryopreservation technology is still sub-optimal, and all studies have consistently shown that the chances of conception are always lower with “frozen-eggs” compared to freshly-retrieved eggs. Finally, regulatory safeguards should be put in place to prevent fertility clinics and medical professionals from “re-selling” imported donor gametes at a profit to the patient, since it would be thoroughly unprofessional for them to earn a profit simply through the ‘brokerage’ of donated human material.

**Keywords** Eggs · Ethics · Export · Gametes · Import · Legal · Sperm

Recent years have seen an increasing transaction of donor sperm and oocytes across international borders [1, 2], con-

current with the more ready availability of clinically assisted reproduction service worldwide, together with the increasing shortage of gamete donors in developed countries. Very often, restrictive legislation on monetary reimbursement of gamete donors particularly in developed countries [3, 4], has led to a loss of incentive for many prospective donors [5], who also face much hassle and inconvenience in gamete donation i.e. lost time and potential earnings, risk of medical complications from superovulatory drugs in the case of oocyte donation [6]. The situation is made worse by the abolishment of donor anonymity in some countries [7, 8], which probably discouraged those who might even consider donating their gametes altruistically without receiving any financial remuneration [8]. Additionally, the shortage of oocyte donors is further exacerbated by the rising trend of age-related female infertility in developed countries, due to increasing numbers of highly-educated urban women choosing to delay marriage and child-bearing in pursuit of educational and career goals [9]. The severe shortage of gamete donors arising from these various factors has in turn led to many fertility clinics sourcing donor sperm and oocytes from abroad. Hence, it is imperative to critically examine the various ethical and legal issues pertaining to the exchange of donor gametes across international borders.

First and foremost, there is a pertinent question of legislative and ethical “contradiction” by the local health authority in permitting the import of donor gametes. For example in the United Kingdom (UK), the underlying principle of gamete donation is to ensure that donors are motivated altruistically, and that they are reimbursed only for direct “out-of-pocket” expenses i.e. traveling costs [10]; so as to avoid outright commercialization and commoditization of donated human material. Consequently, the relatively low rate of monetary reimbursement for sperm and oocyte donors in the UK could be a major contributory factor to the shortage of donor gametes

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[5]. The recently published SEED (Sperm, Egg and Embryo donation) report in the UK recommended reimbursement of £15 ( $\approx$  US \$28) for each donated sperm sample, and £250 ( $\approx$  US \$470) for each oocyte donation cycle [10]. Nevertheless, the Human Fertilization and Embryology Authority (HFEA) in the UK has permitted the import of donor sperm from commercial sperm banks in the United States [11] and Denmark [12], where donors receive much more generous financial remuneration, i.e. sperm donors in the United States are reportedly paid about US\$100 per sample [13]. This is obviously contradictory to the underlying ethical and legal principle of donor reimbursement outlined by the SEED report [10], which was commissioned by the HFEA itself.

Another pertinent concern is the lack of clear and internationally binding legislation and regulatory guidelines overseeing the exchange of donor gametes across international borders. Undoubtedly, socio-cultural differences, as well as varying ethical standards and legislation in different countries, have contributed greatly to the regulatory muddle. Currently, the only coherent regulatory framework that exists is the European Tissues and Cells Directive [14], which calls for traceability of gametes and embryos throughout Europe. However, the directive does not take into account the recruitment of gamete donors from outside the European Union, i.e. commercial sperm banks in the United States. Hence, in some European countries that have abolished donor anonymity, there is a clear risk of donor traceability being lost after some time, particularly if the gametes were sourced from outside the European Union. The most likely scenario imaginable would be foreign commercial sperm banks (i.e. United States) folding-up their business, and subsequently disposing off their records.

The lack of internationally-binding legislation could become even more contentious if things were to go wrong in the international exchange of donor gametes. For example, there could be a mix-up in the ethnicity and blood-group of transported frozen donor sperm; or congenital defects may appear in children born from imported donor gametes due to inappropriate screening and hasty personal history taking for familial record of hereditary diseases. This could very well develop into a complex and long-drawn legal tussle across international borders.

In recent years, the technology of oocyte cryopreservation has progressed sufficiently for the development of “frozen-egg banking,” best exemplified by the establishment of Cryo Eggs International Inc. [15] and The Donor Egg Bank Inc. [16], both of which are located in the United States. It is anticipated that some infertile women may have no choice but to use imported cryopreserved oocytes instead of freshly-retrieved oocytes, due to the shortage of oocyte donors in their locality, which in turn gives rise to new ethical issues. In particular, it must be noted that although oocyte cryopreservation technology has made rapid strides in the past

few years, the technology is still sub-optimal, and all studies have consistently shown that the chances of conception are always lower with cryopreserved oocytes compared to freshly-retrieved oocytes [17, 18]. Given the high costs of clinically assisted reproduction with imported cryopreserved oocytes, the patient must rightfully be informed of this fact through professional counseling.

Finally, regulatory safeguards should be put in place to prevent fertility clinics and medical professionals from “reselling” imported donor gametes at a profit to the patient. They can of course charge a reasonable administration fee for handling all the paperwork needed for regulatory approval by the local health authority and subsequent import of the donor gametes, as well as laboratory fees for storage in liquid nitrogen. The actual cost (including transportation) of the imported donor gametes, as billed by the foreign sperm or egg bank, together with the administration and laboratory fees imposed by the local fertility centre, must be made transparent to the patient. This is because medical doctors ought to earn their living through the provision of specialized medical knowledge and skills; and it would be thoroughly unprofessional for them to earn a profit simply through the ‘brokerage’ of donated human material (imported donor gametes in this case). Moreover, it must be remembered that they would already earn a fair amount of profit in the provision of clinically assisted reproduction service to the patient.

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