

Ethical Issues in Ovum Donation

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Abstract

Ethics is defined as science of morality which translates into behaviour towards patient under care. Reproductive medicine has undergone transformation with the advent of art. It is considered as ethical prerequisite that donor participate voluntarily and without undue influence. Extraction of eggs from the follicles is a invasive procedure proceeded by intensive hormonal treatment. Egg cells remain an important raw material for research in reproductive and regenerative medicine and are needed for mitochondrial replacement. Ovum donation is an excellent option for patients with gonadal dysgenesis premature ovarian failure genetic disorders and menopause. Selection of patient and evaluation of the recipients and donors are vital for the success of oocyte donation programs.

Keywords: Ethics; Ovum donation; ART; Reproductive medicine.

INTRODUCTION

Ethics is defined as science of morality which translates into behaviour towards patient care. It means acting in best interests of patients being cared for. Healthcare provider fulfil a basic need.¹

Reproductive medicine has undergone a transformation with the advent of ART. Better understanding of the process of reproduction has led to discoveries in other field of medicine as well thus helping millions of people even beyond infertility.²

Use of donar gametes, either in the form of donor sperm or donor oocytes is common in ART. In the mid 1980s oocyte donation was introduced.

Consent, in addition to outlining these medical risks, should include counselling regarding the emotional benefits and risks of donation. It is prerequisite that donor participate voluntarily and without undue influence.³

Issue of annonymity related to gamete and embryo donation is emotionally charged. Ability of human beings to know their genetic roots is universal. Vast majority of egg and sperm donors generally choose to be anonymous.

Indications for Oocyte Donation

- Premature ovarian failure
- Ovarian agenesis

- Surgical removal of bilateral ovaries
- Radiotherapy or chemotherapy for ovarian cancer
- Post menopausal patient
- Risk of inheritable genetic disease in children
- Failed IVF due to poor oocyte quality⁴

Oocytes may be obtained from various sources

- Volunteers
- Known donors
- Spare oocyte from IVF programs
- From sterilization patients prepared prior to operation.
- In future oocyte recovery from fetuses may be possible⁴

OVUM DONATION

During Selection of Donar Ethically, following guidelines are recommended

- Age less than 34 years and of proved fertility
- Free of any medical pathology:
 - Thorough gynecological examination
 - Cervical pathology
 - Pelvic USG
- Infectious diseases screening to rule out:
 - Chlamydia Trachomatis
 - Gonorrhoea
 - Syphilis
 - Hepatitis B and C
 - HIV
- Donars to be counseled for suitability and psychological evaluation. Legal counselling done to make them fully aware that they should be willing to abdicate all rights over their gametes.
- Donars should be counseled about the risks of medications and ova retrieval.
- Donars may be compensated for their time, efforts and medical expenses but not for their oocytes.⁵

Right of the children through Gamete Donation

- A child born through ART shall be legitimate child of the couple having been born in the wedlock and with the consent of both the spouses.
- The child will have legal right to parental

support, inheritance and all other privileges.

- If a foreigner or a foreign couple seeks egg donation in India, the child even though born in India, shall not be an Indian citizen.⁵

ART is looked upon by many couples as modality of last resort to fulfill their dreams of parenthood. This increasing demand of ART has led to mushrooming of ART clinics across the country.

The issues related to oocyte donation include

- Strict confidentiality.
- Thorough counselling of all parties.
- Written informed consent.
- Appropriate storage and handling of gametes.
- No women should be treated with gametes or embryos derived of gametes of more than one women during one treatment cycles.
- Donars must give in writing all parental rights concerning the offspring.
- No donar gamete should be stored for more than 5 years.
- No women shall donate more than six times in her life with not less than three month interval between oocyte pickup.⁶

One major characteristics of medically assisted reproduction is the fragmentation of genetic, gestational and social parenthood through IVF, which gives rise to practices of third party reproduction.

Mature egg cells are scarce, delicate and hidden resource. The extraction of eggs from the follicles is an invasive procedure preceded by intensive hormonal treatment. Egg cells remain an important raw material for research in reproductive and regenerative medicine and are needed for mitochondrial replacement.⁷

Oocyte donation is an emotional, expensive and time intensive experience, but it offers a realistic, successful option for many couples.

Pre-Treatment Counselling

Patient and her partner should be explained about the following:

- Oocyte Donation Programme.
- Treatment procedures and its success.
- Time and duration of treatment in relation to menstrual cycle.
- Investigations to be performed before, during and after treatment.

- Informed, written consent.

Counselling of unsuitable donors

- If someone is unsuitable for oocyte donation, it should be explained to the donor and recipient as well. The explanation should be presented sensitively.
- If donor is rejected due to the physical or psychological problems, that require treatment or counselling, centre should provide all assistance.
- When the centre becomes aware that a donor has previously unsuspected disease or is a carrier of a deleterious recessively inherited condition the concerned people should be informed and treatment and counselling offered to them.⁸

Benefits to the donors

- Monetary benefits may be made to the donors in exchange for oocyte donation in accordance with policy and guidelines by the centre and appropriate authorities.
- If an oocyte donor becomes ill as a direct result of making donation, ART centre should reimburse any direct expenses that the donor incurs.⁸

Oocyte donation has also broadened our current knowledge of obstetric management of women with Turner syndrome. The reproductive possibilities for these women have been greatly expanded by oocyte donation. Pregnancy rates after oocyte donation in women with Turner syndrome are equivalent to those of other recipients, suggesting no impact of the syndrome on uterine receptivity.⁹

DISCUSSION

Oocyte donation is now achieved most often through IVF. Controlled ovarian hyperstimulation of the donor is used to increase the number of mature oocytes available at the end of retrieval. Various ART methods are used successfully to achieve donor oocyte pregnancies including Gift, Zift.

Special management issues in oocyte donation cycles include:

- Need for embryo-endometrial synchronization.
- Maintenance of hormonal support of endometrium until after physiological luteal placental shift.
- Issues surrounding recruitment, selection and

screening of oocyte donors.¹⁰

Oocyte donation is an excellent option for the patients with gonadal dysgenesis, premature ovarian failure, genetic disorders and menopause. In infertile couple, medical, psychological and ethical factors play important role. Proper documentation of consent, investigations, procedures and treatment should be maintained to minimise legal complications and to safeguard the personnel involved in Oocyte Donation Programme.¹¹

There is a concern with the identity of the mother and the threat to the legal definition of motherhood arising from fragmenting genetic, gestational, and social mothers.

Egg donor programs have presented numerous clinical challenges:

- Successful preparation of the endometrium in donor oocyte recipients.
- The synchronization of donor/recipient cycles.
- Optimization of ovarian stimulation for donors to strike a balance.

between oocyte yield and safety¹²

This clinical paradigm has served as a critical tool to study both ovarian and endometrial factors contributing to implantation. Unlike sperm donors, egg donors undergo complex and invasive medical procedures each time they donate. Complete donor screening takes several hours, and while cycling, donors are required to be present for monitoring on a near daily basis.¹³

Future Chalanges

At what age do we stop? The risk of pregnancy-related complications increases with maternal age. This risk is compounded by the increased risk of hypertensive disorders conferred by donor egg pregnancies. The effect on children born to mothers of advanced reproductive age conceived via oocyte donation is also not well defined. Concerns related to longevity and the ability to raise a child into adulthood are at the center of the age debate. All prospective recipients of advanced reproductive age must undergo thorough medical screening and counseling about the medical risks of pregnancy by a maternal-fetal medicine specialist. The age limits set for recipients are likely to continue to be the

most challenging.

CONCLUSION

Egg cells remain in high demand for medical and social uses of medically assisted reproduction, but little is known of the practice and its long term physical and emotional effects on Donor. We should continue to monitor the procedures related to the recruitment, treatment, reward of egg donors safeguards for the health and safety of egg donors and recipients. Our understanding reflects physical and psychological consequences of oocyte donation on women's lives.

Oocyte donation has greatly enhanced our ability to treat infertility. Since its inception, egg donation has become one of the mainstays of ART treatment. It has not only enabled successful outcomes in women who otherwise would have been sterile, it has also become an important tool to study various aspects of human reproduction.

REFERENCES

1. Shirish Dafrary, Shyam Desai, Ethics and reproductive health care, Selective topics in obstetrics and gynaecology, Shirish Dafrary, Shyam Desai, BI Publications New Delhi.
2. Sonia Malik Rashmi Sharma what's new in ART. Shalini Rajagarh, Sumita Mehta, Neeraj Goel Advances in Obstetrics and Gynecology Jaypee Delhi Edition 2008.
3. Brezina PR, Zhao Y. The ethical, legal, and social issues impacted by modern assisted reproductive technologies. *Obstet Gynecol Int*. 2012; 2012:686253. doi: 10.1155/2012/686253. Epub 2012 Jan 4. PMID: 22272208; PMCID: PMC3261493.
4. Stahl BC. Ethical Issues of AI. Artificial Intelligence for a Better Future. 2021 Mar 18:35-53. doi: 10.1007/978-3-030-69978-9_4. PMCID: PMC7968615.
5. Shirish Daftary Shyam Desai, Assisted Reproductive Technologies (ART): An overview, Shirish Daftary Shyam Desai, Selected Topics in obstetrics and Gynaecology, BI publications Delhi 2007.
6. Loto OM. An Overview of the Ethical Issues in Assisted Reproductive Technology Practices in Nigeria. *West Afr J Med*. 2021 Jul 29;38(7):679-683. PMID: 34331424.
7. Reproductive Ethics Research gate Aathav Carmel Shaley Carmel shalve Reproductive Ethics Encyclopedia of Global Bioethics Website:-http://www.researchgate.net/publication/321716321_Reproductive_Ethics_Shelve_Carmel. (2015). Reproductive Ethics. 10.1007/978-3-319-05544-2_367-1.
8. Gautam Allahbadia, Rita Das, Rubina Marchant The Art and science of Assisted Reproductive Techniques (ART), Jaypee Publications; New delhi 2002.
9. Karnis MF, Zimon AE, Lalwani SI, Timmreck LS, Klipstein S, Reindollar RH. Risk of death in pregnancy achieved through oocyte. Donation in patients with Turner syndrome: a national survey. *Fertil Steril* 2003;80:498-501.
10. Ajit Virkud, Artificial Reproductive Technology Arjit Virkud Modern Gynaecology 4th edition, APC publishers, Mumbai.
11. Nancy J Kenney¹ Michelle L McGowan², Egg donation compensation: ethical and legal challenges, *Medicolegal and Bioethics* 2014;4 15-24.
12. Serour GI, Serour AG. Ethical issues in infertility. *Best Pract Res Clin Obstet Gynaecol*. 2017 Aug;43:21-31. doi: 10.1016/j.bpobgyn.2017.02.008. Epub 2017 Mar 1. PMID: 28366495.
13. Kort DH, Gosselin J, Choi JM, Thornton MH, Cleary-Goldman J, Sauer MV. Pregnancy after age 50: defining risks for mother and child. *Am J Perinatol* 2012;29:245-50.

