

July-December 2020

Volume 29

Issue 2

PRINT ISSN: 2277-1867

ONLINE ISSN: 2277-8853



JOURNAL OF FORENSIC MEDICINE SCIENCE AND LAW

Official Publication of Medicolegal Association of Maharashtra

Editor-in-chief

Dr Ravindra Deokar

Associate Editors

Dr Sadanand Bhise

Dr Sachin Patil

**MULTISPECIALITY, MULTIDISCIPLINARY, NATIONAL
PEER REVIEWED, OPEN ACCESS, MLAM (SOCIETY) JOURNAL**

Editorial Office Address

Department of Forensic Medicine & Toxicology, Third Floor, Library Building, Seth G S Medical College & KEM Hospital, Parel, Mumbai, Maharashtra, India. Pin-400 012. Email id: mlameditor@gmail.com Phone: 022-24107620 Mobile No. +91-9423016325.



Original Review Article

Assisted Reproductive Technology: A Literature Review

Patil Sachin Sudarshan^{a*}, Deokar Ravindra Baliram^b, Pathak Harish Manilal^c

^aAssociate Professor, ^bProfessor (Additional), ^cProfessor & Head;
Department of Forensic Medicine and Toxicology, Seth G.S. Medical College & KEM Hospital, Mumbai, Maharashtra, India, India. Pin-400012

Article Info

Received on: 22.10.2020

Accepted on: 20.11.2020

Key words

Artificial Insemination,
Surrogacy,
Ethical and Legal
Issues.

Abstract

“Assisted reproductive technology” indicates all the methods which takes effort to achieve pregnancy by keeping sperms or the oocyte external to the human body and shifting the gamete or the embryo into the female reproductive tract. Assisted Reproductive Technology (ART) includes artificial insemination, In Vitro Fertilization and surrogacy. “Artificial insemination” suggests methods of placing the semen into the female reproductive system using artificial means which may be husband’s semen or donor’s semen. ART (regulation) bill 2020 clearly mentions child born of ART will be considered as natural child of commissioning couple and will be having all the privileges and rights of natural child. It also mentions that the donor will not be having any parental right over the child. The prevailing laws in India does not clearly specifies legal implications of ART. Since ART was very essential for many childless couples for having children, it is destined to escalate over period of time. To circumvent the difficulties and untoward situations, appropriate legislative provisions has to be enacted, else the child born out of AID will experience great hardship which will unfair. The Assisted Reproductive Technology (regulation) bill 2020 if implemented effectively as an act will curb the exploitation of commissioning couple or donor and can be instrumental in providing appropriate rights to the child conceived of ART.

1. Introduction

“Assisted reproductive technology” indicates all the methods which takes effort to achieve pregnancy by keeping sperms or the oocyte external to the human body and shifting the gamete or the embryo into the female reproductive tract. Assisted Reproductive Technology (ART) includes artificial insemination, In Vitro Fertilization and surrogacy.¹ “Artificial insemination” suggests

methods of placing the semen into the female reproductive system using artificial means which may be husband’s semen or donor’s semen.² Since last few years artificial insemination has received great importance in various parts of the world as it can be considered as a practical solution for several childless couples.

How to cite this article: Patil SS, Deokar RB, Pathak HM. Assisted Reproductive Technology: A Literature Review. J For Med Sci Law 2020;29(2):61-64.

***Corresponding author:** Dr Sachin S Patil, Associate Professor, Department of Forensic Medicine and Toxicology, Seth G.S. Medical College & KEM Hospital, Mumbai, Maharashtra, India, India. Pin-400012 E-mail ID: sachinpatilmdfm@gmail.com (M): +91- 8108609282

This method of artificial insemination is considered to be favoured method as child is hereditarily connected to at least one of the parents.³

The initial incidence of artificial incidence was stated to be towards the end of thirteenth century, when John Hunter performed on the wife of a linen Draper resulting in normal gestation. Louise Brown born in 1978, was the world first test tube baby who gave birth to the child without utilizing the method of artificial insemination.⁴ World's second test tube baby was born at Calcutta.⁵ Over period of time, there has been rapid rise in commercial Artificial reproductive techniques (ART) being utilized in India, making it worldwide leader. About 400 million rupees were obtained from surrogacy from around 3000 ART clinics.⁶ For proper functioning of the ART clinics, regulation is needed to avoid the misuse of the advanced facilities for illegal and unethical practices.

2. Artificial Insemination

Types of artificial insemination.

- 1) A.I.H. Artificial insemination with semen attained from the husband.
- 2) A.I.D. - Artificial insemination with semen attained from a donor.
- 3) A.I.H.D.- Artificial insemination with semen attained from a husband and donor⁵

There is no practical issue of parenthood in case of AIH as the semen is obtained from the husband. The child obtained from AIH is considered as legitimate and this method is considered to be reasonable as well as agreeable. While in the case of AID, child is hereditarily connected to the person other than husband. The benefit of AIHD was that the child obtained can be considered as due to father's semen. This can decrease the guilt and mental agony in the mind of the father that child does not belong to him. With more admissibility of AID in the society,⁷ there is decline in AIHD but still can be utilized.

Since last few years there has been substantial increase in the Assisted Reproductive technology globally in both developed and developing countries. With increase in GDP of many countries, many infertile couples are capable for opting ART for conceiving child. This ultimately resulted in mammoth growth in number of ART clinics. India is also not excluded from that and has huge growth in number of ART clinics. Hence there has been

questions raised about the safety and efficacy of ART as well as many ethical and legal issues.⁸

Legal issues related to artificial reproductive techniques:

- 1) Legitimacy of the child: Question arise whether the child will be considered as legitimate child of the couple seeking child or surrogate mother along with the person donating the sperm. Child is considered as illegitimate as it is not the product of lawful marriage.
- 2) Divorce or Nullity of marriage: If ART is due to sterility then it does not amount to nullity of marriage or is ground for divorce. But if it is due to impotence, then it can be considered as ground for nullity of marriage or divorce.
- 3) Adultery: Even though there is no punishment for adultery as per Indian law but still it is ground for divorce. But child produced due to ART does not amount to adultery as there is no natural intercourse.
- 4) Incest: There is possibility of incest between the children born by ART and children of the donor. But as per Indian law, Incest is not liable for punishment.⁹
- 5) Consummation of Marriage: Conceiving of child by ART including AIH does not amount to consummation of marriage in spite of child born is biologically of the husband. Marriage still remains voidable.
- 6) Posthumous AIH: Child born through ART to widow by using stored sperms of her deceased husband must be considered as legitimate which may be in contrast to current law as mentioned in Section 112 IEA which states that child born after 280 days of the death of husband is illegitimate.¹⁰

There is variation in status of the children born out of ART in different countries

Status in United states of America

There was big confusion regarding the status of A.I.D. child in relation to the legitimacy. Few cases regarding these issues were in favour of legitimacy while few were against it.

- 1) Strand vs Strand was the first case to address the issues about legitimacy of the child born of A.I.D. The case concluded that if there is consent given by the husband for A. I.D., then the child born of A.I.D. will be

considered to be legitimate child of the married couple and not of the donor.

- 2) Doornbos vs Doornbos case: The court concluded that the child conceived through the process of A.I.D in spite of the consent of the husband will be considered as an illegitimate.
- 3) GURSKY v. GURSKY case, Supreme Court, Special Term, Kings County.: court also coincide with the judgement of Doornbos Vs Doornbos. But it also added that husband has to provide support to the child conceived from A.I.D.¹¹

Position in U K:

Legitimacy act 1926 concludes that the child born out of wedlock will be considered an illegitimate until they get married subsequently. As this act was in previous era, there is no mention of child born of A.I.D. But it was incorporated in later in Family law reforms act in 1987 where the sentence act of intercourse resulting in the birth was replaced by act of insemination resulting into birth.

Other countries:

In many countries there is no difference between legitimate and illegitimate children including countries like New Zealand, Jamaica etc. Major religions and several countries have policies or recommendations about sperm donation. Few religions and countries are opposed to ART treatments.¹²

Status of A.I.D. child under Indian law:

- Concept of A.I.D. has not been that common as far as India is concerned. With the birth of the first scientifically well documented test tube baby in 1986 in India, there was escalation of IVF clinics over the country deprived of accreditation, supervisory and regulatory body as well as absence of government's control. This forced the Indian Council of Medical Research (ICMR) to prepare National Guidelines for ART Clinics in India in 2002.
- Subsequently, the Ministry of Health & Family Welfare, Government of India modifies and published the National Guidelines in 2005.
- Then, Indian Council of Medical Research (ICMR) drafted Assisted Reproductive Technology (Regulation) Bill in year 2008 and forwarded to the Ministry of Health & Family Welfare, which was then revised by the Ministry of Law & Justice as Assisted Reproductive Technology (Regulation) Bill-2013. Assisted Reproductive

Technology (Regulation) Bill was tabled on multiple occasions.¹³

With advent of ART, multiple medicolegal issues come into picture. One of the issues related to A.I.D. was legitimacy of the child born by A.I.D. In Case of Nirmala of Chandigarh, the court finally gave the judgement that child born of AID be considered as legitimate and as her husband had given consent for AID, it does not amount to adultery.¹¹ Even the ICMR guidelines specifies that child born of assisted reproductive technology to be considered to have right of parentage, inheritance and support.¹⁴ Currently there are no punishments for not following the guidelines. Only Action may be taken by state medical council or NMC. Solitary act applicable in relation to this is Delhi Artificial insemination act which is applicable in Delhi and no law applicable to the rest of the country.¹⁰

Current scenario in relation to art legislations.

The Government of India has introduced THE ASSISTED REPRODUCTIVE TECHNOLOGY (REGULATION) BILL 2020 in Loksabha on 14th September 2020.

- It clearly specifies that all ART services to be carried out by ART clinics and ART banks for storing and supplying gametes.
- All the ART clinics and ART banks to be registered in National registry of banks and clinics in India.
- State governments are expected to facilitate the registration process through registration authorities.
- Registrations of ART clinics and ART banks will be done only if they strictly satisfy the prescribed standards, failure of which result in suspension of registration.
- This bill provides multiple provisions which are aimed at curbing commercialization of surrogacy and other ART methods.
- There is provision of the women donating oocyte has to be married and have at least one live child of minimum three years of age.
- The age of the males donating semen has to be between 21 years and 55 years while females donating oocyte has to be between 23 years and 35 years.
- Female can donate oocyte only once in lifetime and not more than 7 oocytes to be recovered from her.

- ART bank cannot supply gamete from one donor to more than one couple.
- This bill also make provision for insurance cover to oocyte donor female in case of damage or death.
- It also restricts the sex determination of the child and gave emphasis for screening of genetic diseases before embryo implantation.
- It also makes provision for National and state board for surrogacy formed under Surrogacy regulation Bill 2019. To act national and state boards for regulation of ART services.
- It also prescribes offences comprising of 1) abuse or desertion of child born of ART 2) commercialization or trading or importing gamete or human embryo 3) using touts or agents for getting donors 4) Abuse of donor, commissioning couple or woman in any way 5) transfer of human embryo in male or animal; as well as punishment in form of imprisonment or fine.

Status of child born of ART

This bill clearly mentions child born of ART will be considered as natural child of commissioning couple and will be having all the privileges and rights of natural child. It also mentions that the donor will not be having any parental right over the child.¹

3. Conclusion:

The prevailing laws in India does not clearly specifies legal implications of ART. Since ART was very essential for many childless couples for having children, it is destined to escalate over period of time. To circumvent the difficulties and untoward situations, appropriate legislative provisions has to be enacted, else the child born out of AID will experience great hardship which will unfair. The Assisted Reproductive Technology (regulation) bill 2020 if implemented effectively as an act will curb the exploitation of commissioning couple or donor and can be instrumental in providing appropriate rights to the child conceived of ART.

Conflict of interest: None.

References:

1. The Assisted Reproductive Technology (regulation) bill, 2020. Available from http://164.100.47.4/BillsTexts/LSBillTexts/Asintroduc ed/97_2020_LS_Eng.pdf (Accessed from 10th October 2020)
2. The Assisted Reproductive Technology (regulation) bill, 2017. Available from <https://dhr.gov.in/sites/default/files/Assited%20Re productive%20Technology%20%28Regulation%29%2 0Bill%2C2017.pdf> (Accessed from 04th October 2020)
3. Legal Implications of Medical Advancements by Kusum Kumar, New horizons of Law (edited by P., Leela Krishnan and G. Sadaswan Nair. Dept of Law. Cochin University of law and Cochin university of science & Technology, Cochin 1989. P.19P
4. Vii, K.; " Text Book' of Forensic Medicine and Toxicology: Principles and Practice; Second Edition, Elsevier, India. 2002: 712-717.
5. Dikshit PC. Text Book' of Forensic Medicine and Toxicology; First edition,2007, peeppee publishers, New Delhi:362,365.
6. Bhalla N, Thapliyal M. Foreigners are flocking to India to rent wombs and grow surrogate babies. September 30 2013. Available from: <https://www.businessinsider.com/india-surrogate-mother-industry-2013-9?IR=T> (Accessed on 10th October, 2020).
7. Shenoy V. Artificial Insemination - In Vitro Fertilization and challenges caused to Legal System. Available from:http://www.legalserviceindia.com/articles/art_ i ns.htm
8. Malhotra N, Shah D, Pai R, Pai HD, Bankar M. Assisted reproductive technology in India: A 3-year retrospective data analysis. Journal of human reproductive sciences. 2013 Oct;6(4):235-240.
9. Reddy KSN and Murthy O.P. The Essentials of Forensic Medicine and Toxicology,34th edition, 2017, Jaypee brothers' publishers, New Delhi:362-363.
10. Aggrawal A. Forensic Medicine and Toxicology.1st edition, 2017, Avichal publishing company, New Delhi: 324,328.
11. SITAKUMARI T. Legal status of artificially inseminated child in India. Available from: http://14.139.60.114:8080/jspui/bitstream/1234567 89/15471/1/014_Legal%20Status%20of%20Artificial y%20Inseminated%20Child%20in%20India.pdf (Accessed on 10th October, 2020).
12. Legitimacy. United Kingdom. Available from https://assets.publishing.service.gov.uk/government /uploads/system/uploads/attachment_data/file/632 334/legitimacy.pdf (Accessed on 04 October 2020).
13. Devi M. G. IVF in India - Swinging in Legal and Ethical Aspects. ET Health World. Available from: <https://health.economictimes.indiatimes.com/health -files/ivf-in-india-swinging-in-legal-and-ethical- aspects/1725> (Accessed on 10th October, 2020).
14. Yadav M. Medico-Legal & Ethical Aspects of Artificial Insemination. JIAFM,2006: 28 (4),131-134.