## **Insight into Different Aspects of Surrogacy Practices**

Nayana Hitesh Patel, Yuvraj Digvijaysingh Jadeja, Harsha Karsan Bhadarka, Molina Niket Patel, Niket Hitesh Patel, Nilofar Rahematkhan Sodagar<sup>1</sup>

Department of Reproductive Medicine, Akanksha Hospital and Research Institute, A Unit of Sat Kaival Hospital Pvt. Ltd., <sup>1</sup>Research and Development Unit, Sat Kaival Hospital Pvt. Ltd., Lambhvel, Anand, Gujarat, India

Surrogacy is an important method of assisted reproductive technology wherein a woman carries pregnancy for another couple. Number of couples around the world require surrogacy services for various reasons. Although this arrangement seems to be beneficial for all parties concerned, there are complex social, ethical, moral, and legal issues associated with it. It is these complexities that have made this practice unpopular in many parts of the world. Surrogacy in India has had its own journey from India becoming popular as a surrogacy center since 2002 to the Surrogacy (Regulation) Bill, 2016, which would restrict the option of surrogacy for many. Surrogacy is an important medical service for all those couples who would otherwise not have been able to produce a child. Surrogacy would be practiced harmoniously if delicate issues associated with surrogacy will be addressed properly through appropriately framed laws which would protect the rights of surrogate mothers, intended parents, and child born through surrogacy.

**KEYWORDS:** Assisted reproduction, gestational carrier, intended parent, international scenario on surrogacy, surrogacy, surrogate mother

#### Introduction

he word "surrogate" is rooted in Latin "Subrogare" (to substitute), which "appointed to act in the place of." It means a substitute, especially a person deputizing for another in a specific role, so the surrogate mother implies a woman who becomes pregnant and gives birth to a child with the intention of giving away this child to another person or couple, commonly referred to as the "intended" "commissioning" parents.[1] Surrogacy is an important fertility treatment, wherein advent of in vitro fertilization (IVF) has made motherhood possible for women without uterus, with uterine anomalies preventing pregnancies, with serious medical problems, or with other contraindications for pregnancy, to achieve motherhood through the use of embryo created by themselves or donor and transferred to the uterus of gestational carrier. This technique has also made it possible for gay couples and single men to achieve fatherhood by having embryo created with their sperm and donor oocytes.

Surrogacy is of two types: traditional and gestational. Traditional (genetic/partial/straight) surrogacy is



the result of artificial insemination of the surrogate mother with the intended father's sperm, making her a genetic parent along with the intended father. Gestational surrogacy (host/full surrogacy) is defined as arrangement in which an embryo from the intended parents or from a donated oocyte or sperm is transferred to the surrogate uterus. In gestational surrogacy, the woman who carries the child has no genetic connection to the child.

Surrogacy may be commercial or altruistic, depending upon whether the surrogate receives financial reward for her pregnancy. If surrogate receives money for the surrogacy arrangement, it is considered commercial, and if she receives no compensation beyond reimbursement of her medical and other pregnancy-related expenses along with the insurance coverage for her, it is referred to as altruistic.<sup>[2]</sup>

Address for correspondence: Dr. Nayana Hitesh Patel,
Akanksha Hospital and Research Institute, A Unit of Sat
Kaival Hospital Pvt. Ltd., Nr. Shrushti English Medium School,
Lambhvel, Anand - 387 310, Gujarat, India.
E-mail: nayana@ivf-surrogate.com

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

For reprints contact: reprints@medknow.com

**How to cite this article:** Patel NH, Jadeja YD, Bhadarka HK, Patel MN, Patel NH, Sodagar NR. Insight into different aspects of surrogacy practices. J Hum Reprod Sci 2018;11:212-8.

#### HISTORICAL ASPECT OF SURROGACY

Surrogacy practice has been referred to since antiquity. Babylonian law and customs allowed this practice to avoid otherwise inevitable divorce. [3] The earliest known description of surrogacy is claimed to be the servant Hagar begetting a child for the childless Sarah through her husband Abraham, described in the biblical Book of Genesis. [4]

In Bible, Rachel asked her maid Bilhah to conceive a child with her husband Jacob. The concept of surrogacy is also found in Hindu mythology, as despite taking birth from the womb of Rohini, Balram is regarded as the son of mother Devaki and elder brother of Lord Krishna. From middle age to modern times, reproductive services have been provided for fee.

#### LANDMARK YEARS IN SURROGACY

1980 – Michigan Lawyer Noel Keane wrote the first surrogacy contract.

1985 – A woman carried the first successful gestational surrogate pregnancy in the USA.

1986 – Melissa Stern, otherwise known as "Baby M," was born in the U.S. The surrogate and biological mother, Mary Beth Whitehead, refused to cede custody of Melissa to the couple with whom she made the surrogacy agreement.

1990 – In California, gestational carrier Anna Johnson refused to give up the baby to intended parents Mark and Crispina Calvert. The couple sued her for custody (Calvert v. Johnson), and the court upheld their parental rights. In doing so, it legally defined the true mother as the woman who, according to the surrogacy agreement, intends to create and raise a child.

### **INDICATION FOR SURROGACY**

Absolute indication for surrogacy is the absence of uterus. Causes for it can be Mayer-Rokitansky-Kuster-Hauser syndrome<sup>[4]</sup> or history of obstetrics hysterectomy or hysterectomy for gynecological indications such as cervical cancer or endometrial cancer. Apart from this, significant structural abnormalities such as small unicornuate uterus, T-shaped uterus, or multiple fibroids with failed fertility treatment attempts also constitute indications. Women with severe medical conditions (heart or renal diseases) which contraindication of pregnancy are the other indications for surrogacy. Surrogacy can also be considered as a last resort for the treatment of patient with repeated miscarriage and recurrent implantation failure where all possible tools for self-pregnancy have been exhausted.<sup>[5]</sup> Biological impossibility to conceive or bear

a child which applied to same-sex couples or single men also may necessitate surrogacy.

#### **SELECTION OF SURROGATE**

As per Draft Assisted Reproductive Technology (Regulation) Bill, 2014, [6] surrogate is generally 23-35 years old (25-35 years as per the Surrogacy Bill, 2016) married woman having one child of her own and of minimum 3 years old, with not <2 years interval between two deliveries. Consent of surrogate's spouse is mandatory for her to become a surrogate mother. A typical screening process involves an extensive medical and psychological assessment as well as thorough criminal and financial background checks. Routine blood tests are done along with tests to rule out human immunodeficiency virus, hepatitis B virus surface antigen, hepatitis C virus; in addition, electrocardiogram, Pap smear, and mammogram are also recommended. She will also undergo a thorough pelvic and abdominal ultrasound to rule out any anatomical abnormality.

#### Counseling

In-depth counseling of all the parties engaged in surrogacy arrangements is of paramount importance. They must be confident and comfortable with their decisions and have trust in each other. Many issues must be discussed with both the genetic couple and the proposed surrogate:

For the genetic couple:

- All alternative treatment options
- The need for in-depth counseling
- The practical difficulty and cost of treatment
- The psychological risks of surrogacy
- Potential psychological risk to the child
- The chances of having multiple pregnancies if >1 embryo is transferred
- The possibility that a child being born with any abnormality
- The importance of obtaining legal advice and legal complexity associated with surrogacy
- Counseling for option of adoption or life without a child.

#### For surrogate:

- The full implications of undergoing treatment by IVF and surrogacy
- The possibility of multiple pregnancies
- Social implication associated with surrogacy practice
- The medical risks associated with pregnancy
- Psychological risks associated with surrogacy
- The possibility of sense of bereavement while giving baby to the genetic parents.

### LEGAL REQUIREMENTS

Once a surrogate and intended parent decide to move forward together, they need to make it official by drafting a legal contract. Each party has their own attorney to ensure that their legal interests are represented and protected. Once everyone agrees to the terms of the contract and each lawyer has had a chance to review and approve it, contracts are signed, and medical process can begin.

#### Documents required from the surrogate

Identity proof in terms of aadhar card, voter Id, school leaving certificate, birth certificate for age verification, marriage certificate, if divorced then divorce certificate, and if widow then death certificate of the spouse is required.

#### Documents required from the couple/single parent

Identity and address proof of both couples (aadhaar card, voter ID, or passport) and marriage certificate. In case of single parent, only identity and address proof is required.

#### SYNCHRONIZATION OF CYCLE

The surrogate embryo transfer could be fresh or frozen transfer and subject to availability of the gestational carrier. With advent of excellent vitrification techniques, surrogacy cycles have become less difficult for assisted reproductive technology (ART) clinic with good embryology laboratory and freezing facility.

For a fresh surrogate transfer, the surrogate and the intended mother cycle may be synchronized with oral contraceptive pills or progesterone pills or surrogate may be put on agonist injection for flexibility of transfer dates.

The surrogate is started on estrogen tablets from the 3<sup>rd</sup> day of her cycle for around 10 days. On reaching of minimum 8 mm, she is then put on progesterone supplementation for 3 days/5 days before a planned cleavage stage/blastocyst transfer, respectively.

#### **OBSTETRIC CARE OF SURROGATE**

Once a pregnancy is confirmed in the gestational carrier depending on the facility of the ART clinic, she either stays in the surrogate house or at her home. The concept of surrogate house has recently caught a lot of attention for various reasons. Surrogate house is a place where surrogate stays for her entire antenatal period till the date of delivery and all her medical and personal requirements are taken care of. The obstetrics care of surrogate is extensive due to the preciousness of the pregnancy. She stays under the supervision of 24-h nursing staff along with dietician, physiotherapist, counselors, and

gynecologist for her medical care. It is due to this care and available facilities that intended couples have taken up more liking towards the concept of surrogate house. Although staying at surrogate house is preferred practice these days, considering the other side of coin, it could be emotionally taxing for surrogate and her entire family as she has to live away from her own child/children and family; however, during their stay at surrogate house, surrogate can go home for few weeks during pregnancy and her family members can also visit her at surrogate house. Staying at surrogate house should be optional and not compulsion for surrogate mother and she should be given a choice.

Surrogates undergo obstetrics assessment every 20 days till the date of delivery, obstetrics scans at 6–8 weeks, anomaly scan at 11–13 weeks, anomaly scan and 3D-4D at 20–22 weeks, and growth scan at 28 weeks and 34–36 weeks. Any additional scan is subject to the obstetric need.

The intended couple is sent regular update regarding the surrogate's pregnancy in the form of her weight gain, vitals, fetal growth, and antenatal investigation reports and scans. Postdelivery, the surrogate is kept under observation for a minimum of 15 days before discharge.

#### RISKS ASSOCIATED WITH SURROGACY

The major risk associated with surrogacy is that of obstetrics complication and multiple order pregnancy being the most common. Recently, lot of recommendations are being made by American Society for Reproductive Medicine (ASRM) and European Society of Human Reproduction and Embryology committees for single embryo transfer, but yet only 15%-20% of clinics follow single embryo transfer norms.[7] However, it is an improvement from the previous years, and more and more clinics are accepting this policy.<sup>[7]</sup> Pregnancy, birth, and the postpartum period includes complications such as preeclampsia and eclampsia, urinary tract infections, stress incontinence, and gestational diabetes and rare complications such as amniotic fluid embolism and possibility of postpartum hemorrhage, but these risks are associated with pregnancy in general and not specific to surrogacy.

Apart from physical risk, surrogacy may be reason for emotional trauma as the study by Foster (1987) states that many surrogate mothers face emotional problems after having to relinquish the child. However, a study by Jadva *et al.*<sup>[8]</sup> indicates that although some women experience emotional problems in handing over the baby, these feelings appeared to lessen during the weeks following the birth.<sup>[8]</sup>

# ETHICAL CONCERNS WITH SURROGACY PROCEDURE

Surrogacy has raised many ethical debates in the past. The prime ethical concerns raised in the whole system of surrogacy is regarding the concern about exploitation, commodification, and/or coercion when women are paid to be pregnant and deliver babies, especially in cases where there are large wealth and power differentials between intended parents and surrogates. However, the counter to it is a woman's right to enter in to a contract and to make decision regarding her own body. Womb commodification is a term sometimes used due to the economic agents engaged in the practice. The commodification arrangement raises the argument whether women are being given control over their body or being exploited for their individual body parts. [9]

The other major argument against womb commodification is that it allows the rich to take advantage of the willingness of poor women to perform any job as long as they are able to earn a wage.<sup>[10]</sup>

Another ethical issue raised is in relation to the motherhood status of women involved. What could be the relationship between genetic mother, gestational mother, and social mother? Is it possible to socially or legally accept multiple motherhood? Should a child born via surrogacy have the right to know the identity of any/all of the people involved in that child's conception and delivery?

# RELIGIOUS ASPECTS AND ISSUES WITH SURROGACY

Various religions around the world take different stance with regard to surrogacy practice and ART in general.

Paragraph 2376 of the Catechism of the Catholic Church states that Techniques that entail the dissociation of husband and wife, by the intrusion of a person other than the couple (donation of sperm or ovum, surrogate uterus), are gravely immoral.<sup>[11]</sup>

Islam also has similar approach regarding their Chastity. Jewish religious establishments have now accepted surrogacy only if it is full gestational surrogacy with both intended parents' gametes included and fertilization done via IVF.<sup>[12,13]</sup>

The religious stands for surrogacy are all with regard to traditional surrogacy as that was the only way during ancient time; however, with advent of IVF and gestational surrogacy, the relevance of these beliefs is being questioned.

# ECONOMICAL ASPECTS OF SURROGACY AND REPRODUCTIVE TOURISM

Complex social, moral, ethical, and especially legal concerns posed by surrogacy in couple's native country drive them to avail these fertility services outside their nation. Surrogacy apart from IVF and donor programs has recently been one of the main sought after procedures in fertility tourism.

About 20,000–25,000 women annually seek cross-border ART service.<sup>[14,15]</sup>

Israel, Mexico, Barbados, etc., have been the destination for cross-border IVF treatments due to their liberal policies. European couples also prefer the USA for similar reasons. India and other Asian countries are the main destinations for U.S. women seeking fertility treatments, for 40% of U.S women who seek IVF undergo IVF with egg donation through reproductive tourism.<sup>[14]</sup>

Commercial surrogacy is allowed in India since 2002. Since then, India had emerged as a new surrogacy hub in the world. Many foreign nationals including Overseas Citizens of India (OCIs) and People of Indian Origin (PIOs) were choosing India as destination for surrogacy treatment over other countries due to good medical facilities and infrastructure, relatively lower finances, and potential surrogates with Indian social values. The scale of economics involved in surrogacy is unknown, but a study by the United Nations in July 2012 estimated the business at >\$400 million a year, with over 3000 fertility clinics across India. [15]

In the past 15 years, the number of gestational carrier cycles increased by >470% and a large majority of (69.4%) clinics now offer this treatment according to the US registry data. [16]

#### SOCIAL IMPACT WITH SURROGACY

By becoming commercial surrogates, women in India are enabling themselves to improve not only their lives but also the lives of their families. It is common for surrogates to have had controlled access to education, which would limit the opportunities for employment in the market. Payment for surrogacy varies by contract estimates range from "that equivalent to" three times what the head of house could make in a month. To earn in 9 months an amount of around Rs. 450,000-500,000 can provide her and her entire family access to better housing, food, education, and sanitization that would otherwise be difficult.

### PSYCHOLOGICAL IMPACT WITH SURROGACY

Being last resort of treatment for many medical indications for infertility, surrogacy poses a new complexity on psychological aspects and again requires multidisciplinary approach. Surrogacy brings to light a cobweb of possible relationships, which could sometimes be emotionally taxing. The ASRM guidelines<sup>[17]</sup> states that the physician should strongly recommend psychosocial education and counseling by a qualified mental health professional to all intended parents.

The main element in the success of surrogacy lies in exploring and deeply understanding its psychological arm and the key to it is the quality of relationships between the intended parents and gestational carrier. Unlike the donor egg programs where the intended parent do not share a relationship with donor and know only nonidentifying information about her, whereas intended parents working with a gestational surrogate typically share a personal relationship with her that will last throughout the pregnancy and often beyond. In a longitudinal study<sup>[18]</sup> of 42 families created through surrogacy, intended parents were interviewed over a 10-year period four times when the children were aged 1, 3, 7, and 10 years, respectively. The study looked at parent's motivation for surrogacy, relationship with the surrogate, experience of the pregnancy before and after the birth, contact with surrogate after birth, disclosure to family and friends about the process, and when the children were old enough to understand, disclosure to children. Of the 42 subject families, 23 used surrogates unrelated genetically to the child. Nineteen were so-called traditional surrogates. Twenty-nine (69%) of the couple had not known the surrogate before arrangement and 13 (31%) worked with a family member or friend. Not unexpectedly what motivated couple toward surrogacy were years of failed IVF cycles (43%) or the intended mother having no uterus (38%). Couples reported that their relationship with the carrier was good. When the children aged 1 year, most had continued contact with the carrier and planned to tell the child. When the children aged 10 years, the contact with the surrogate had decreased somewhat, but some maintained good relationship. Ninety percent of children had been told about nature of their conception and had positive feeling about the surrogate and their surrogacy birth. However, most of the intended parents who had used traditional surrogate did not declare to their children about their genetic connection to her. For most of the parents, the quality of their marital relationship had not been impacted negatively by the experience of surrogacy and 93% of couples were still married.

Although a gamut of psychological issues have been raised with surrogacy, on seeing the larger picture

except for few cases, the surrogate and intended parents and child seem to thrive in harmony. Studies have convincingly shown that children through the 3<sup>rd</sup> party reproduction are doing well psychologically and developmentally and do not appear to be adversely affected by the lack of a genetic or gestational link to the intended parent.<sup>[19]</sup>

# TRANSNATIONAL SURROGACY, CITIZENSHIP, AND INTERNATIONAL SCENARIO

Jus soli (right to soil) and Jus Sanguinis (right to blood) have been the traditional establishment for deciding citizenship. Surrogacy challenges this traditional view of citizenship by redefining what it means to be a mother. Many a time, legal citizenship has been the bone of contention in surrogacy.

The Hague Conference Permanent Bureau identified the question of citizenship of these children as a "pressing problem" in the Permanent Bureau 2014 Study.[20,21] According to the U.S. Department of State, Bureau of Consular Affairs, for the child to be a U.S. citizen, one or both of the child's genetic parents must be a U.S. citizen. Further, in some countries, the child will not be a citizen of the country in which he/she is born because the surrogate mother is not legally the parent of said child. However, with lot of experience over the years, the picture has become clearer and ambiguities in laws are decreasing. One of the landmark cases of problematic transnational surrogacy is that of baby Manji born in 2008 in India. Manji's birth was the result of a commercial surrogate contract between her Japanese parents and her Indian surrogate. Before Manji's birth, her parents divorced and her commissioning mother refused to claim her. Under Indian law, an infant's passport may only be issued in conjunction with the mother. Since neither her Japanese nor Indian mother would claim Manji, for a brief period, her citizenship was not assigned until her grandmother claimed her. Manji is currently 9 years old happily growing. This was a landmark case as lot of legal deficiencies were realized and successfully rectified making the system and laws relating to citizenship more clear and standard.

In Europe, surrogacy is not officially allowed in Austria, Bulgaria, Denmark, Finland, France, Germany, Italy, Malta, Norway, Portugal, Spain, and Sweden. Altruistic, but not commercial, surrogacy is allowed in Belgium, Greece, the Netherlands, and the UK. Some European countries, such as Poland and the Czech Republic, currently have no laws regulating surrogacy. [22,23] Commercial surrogacy is legal in Georgia, Israel, Ukraine, Russia, India, and California, USA, while in many states of the USA, only altruistic

surrogacy is allowed. Altruistic surrogacy is also allowed in Australia, Canada, and New Zealand. [24] In most Middle Eastern countries, religious authorities do not allow surrogacy. [25]

Surrogacy was previously illegal in Bulgaria; however, due to high illegal and underground practice, the government decided to sanction it. Instead of using the term surrogate, Bulgaria calls it the "substitute mother." [13]

#### SURROGACY IN INDIA: CURRENT SCENARIO

Commercial surrogacy was allowed in India for foreigners since 2002. With provision in draft ART Bill, 2014<sup>[6]</sup> and notification from the Health Ministry of India<sup>[26]</sup> on November 3, 2015, surrogacy is banned for foreign nationals including OCIs and PIOs since then. The Cabinet Approved the Surrogacy (Regulation) Bill 2016, which is pending parliamentary approval, bans all other forms of commercial surrogacy in India. Furthermore, the proposed Bill allows surrogacy only for infertile Indian couples who are married for at least 5 years with medical indication for surrogacy. The Bill prohibits surrogacy arrangement for gay, live-in couples, single parents, OCIs, and PIOs along with foreigners. Furthermore, as per the Surrogacy Bill, intending couple must not have any surviving child biologically or through adoption or through surrogacy earlier. It also states that if any intending couple or any person who seeks the aid of any surrogacy clinic, laboratory, or of a registered medical practitioner, gynecologist, pediatrician, human embryologist, or any other person for commercial surrogacy or for conducting surrogacy procedures for commercial purposes shall be punishable with imprisonment for a term which shall not be <5 years and with fine which may extend to Rs. 500,000 for the first offence and for any subsequent offence with imprisonment which may extend to 10 years and with fine which may extend to Rs. 1,000,000. Multiple fallacies are being felt in the law, and recommendations for amendments are being made by various medical, social, and legal groups.

#### Conclusion

As Souer put it perhaps more than any other form of assisted reproduction, a thorough understanding of the medicine, the psychology, and the law that relates to this important clinical activity is an absolute requisite to the successful practice of surrogacy.

Surrogacy does bring to light a tangle of possible complex connections as this unique aspect of surrogacy has led it becoming the most controversial of all the assisted reproductive techniques in recent years. To conclude, the importance of surrogacy practice in ART cannot be taken lightly. It has proved to be a blessing and medical marvel for many couples to date. All physicians rendering this services must understand the fact that, with the privilege of producing gestational carrier treatment comes the professional responsibility to practice safely and ethically, mitigating risks for gestational carrier and children born from this practice and in turn the risk to our professional autonomy. Arguments of procreative liberty, privacy, and autonomy favor surrogacy, but arguments against it as discussed are undue inducements related to compensation, commodification of women and concern about the best interest of the resulting child. All positives and negatives taken into consideration, we cannot negate the fact that gestational surrogacy gives hope to individual and couples who could not otherwise build a family outside of adoption. We will run the risk of losing the privilege to provide this important treatment altogether if a fair and legal middle ground is not agreed upon between the medical practitioner and regulatory bodies and of course the intended couples requiring this form of medical services.

### Financial support and sponsorship

Nil

#### **Conflicts of interest**

There are no conflicts of interest.

#### REFERENCES

- Shenfield F, Pennings G, Cohen J, Devroey P, de Wert G, Tarlatzis B. ESHRE Task Force on ethics and law 10: Surrogacy. Hum Reprod 2005;20:2705-7.
- Surrogacy (Regulation Bill). Government of India; 2016. Available from: http://164.100.47.4/BillsTexts/LSBillTexts/ Asintroduced/257\_LS\_2016\_Eng.pdf. [Last accessed on 2018 Sep 20].
- Postgate JN. Early Mesopotamia Society and Economy at the Dawn of History. London: Routledge; 1992. p. 105.
- Lindenman E, Shepard MK, Pescovitz OH. Müllerian agenesis: An update. Obstet Gynecol 1997;90:307-12.
- Aflatoonian N, Eftekhar M, Aflatoonian B, Rahmani E, Aflatoonian A. Surrogacy as a good option for treatment of repeated implantation failure: A case series. Iran J Reprod Med 2013;11:77-80.
- Draft Assisted Reproductive Technology (Regulation) Bill. New Delhi: Ministry of Health and Family Welfare, Government of India, Indian Council of Medical Research; 2014.
- Maheshwari A, Griffiths S, Bhattacharya S. Global variations in the uptake of single embryo transfer. Hum Reprod Update 2011;17:107-20.
- Jadva V, Murray C, Lycett E, MacCallum F, Golombok S. Surrogacy: The experiences of surrogate mothers. Hum Reprod 2003;18:2196-204.
- Kimbrell A. The Human Body Shop: The Engineering and Marketing of Life. New York: Harper San Francisco; 1993. p. 101.

- Honjo S, Arai S, Kaneko H, Ujiie T, Murase S, Sechiyama H, et al. Antenatal depression and maternal-fetal attachment. Psychopathology 2003;36:304-11.
- Catholic Church, Catechism of the Catholic Church, Rev. ed., Geoffrey Chapman, London, 1999, Paragraph 2376.
- 12. Inhorn MC, Patrizio P. Rethinking reproductive "tourism" as reproductive "exile". Fertil Steril 2009;92:904-6.
- Pennings G. Reply: Reproductive exile versus reproductive tourism. Hum Reprod 2005;20:3571-2.
- Hughes EG, Dejean D. Cross-border fertility services in North America: A survey of Canadian and American providers. Fertil Steril 2010;94:e16-9.
- Bhalla N, Thapliyal M. India Seeks to Regulate its Booming Surrogacy Industry. Medscape Reuters Health News; 2013.
   Available from: https://www.reuters.com/article/us-indiasurrogates/india-seeks-to-regulate-its-booming-rent-a-wombindustry-idUSBRE98T07F20130930. [Last accessed on 2018 Sep 20]
- Kapfhamer J, Van Voorhis B. Gestational surrogacy: A call for safer practice. Fertil Steril 2016;106:270-1.
- Practice Committee of the American Society for Reproductive Medicine, Practice Committee for the Society for Assisted Reproductive Technology. Recommendations for practices utilizing gestational carriers: An ASRM Practice Committee guideline. Fertil Steril 2012;97:1301-8.
- Jadva V, Blake L, Casey P, Golombok S. Surrogacy families 10 years on: Relationship with the surrogate, decisions over disclosure and children's understanding of their surrogacy origins. Hum Reprod 2012;27:3008-14.
- 19. Golombok S, Murray C, Jadva V, Lycett E, MacCallum F, Rust J.

- Non-genetic and non-gestational parenthood: Consequences for parent-child relationships and the psychological well-being of mothers, fathers and children at age 3. Hum Reprod 2006;21:1918-24.
- 20. Hague Conference Permanent Bureau; 2014a. p. 84-94.
- Darnovsky M, Beeson D. Global Surrogacy Practices ISS Working Paper Series/General Series 2014;601;1-54. Available from: https://repub.eur.nl/pub/77402/wp601.pdf. [Last accessed on 2018 Sep 20].
- Brunet L, Carruthers J, Davaki K, King D, Marzo C, Mccandless JA. Comparative Study on the Regime of Surrogacy in EU Member States. Directorate General for Internal Policies, Policy Department C: Citizens' Rights and Constitutional Affairs; 2013. Available from: http://www.europarl.europa.eu/RegData/etudes/STUD/2013/474403/IPOL-JURI\_ET(2013)474403\_EN.pdf. [Last accessed on 2018 Sep 20].
- Deomampo D. Defining parents, making citizens: Nationality and citizenship in transnational surrogacy. Med Anthropol 2015;34:210-25.
- Söderström-Anttila V, Wennerholm UB, Loft A, Pinborg A, Aittomäki K, Romundstad LB, et al. Surrogacy: Outcomes for surrogate mothers, children and the resulting families-a systematic review. Hum Reprod Update 2016;22:260-76.
- Aramesh K. Iran's experience with surrogate motherhood:
   An Islamic view and ethical concerns. J Med Ethics 2009;35:320-2.
- Notification on Surrogacy (Circular No.: 462). Ministry of Home Affairs (Foreign Division), India; 3 November, 2015. Available from: https://www.mha.gov.in/PDF\_Other/surrogacy03112015. pdf. [Last accessed on 2018 Sep 20].