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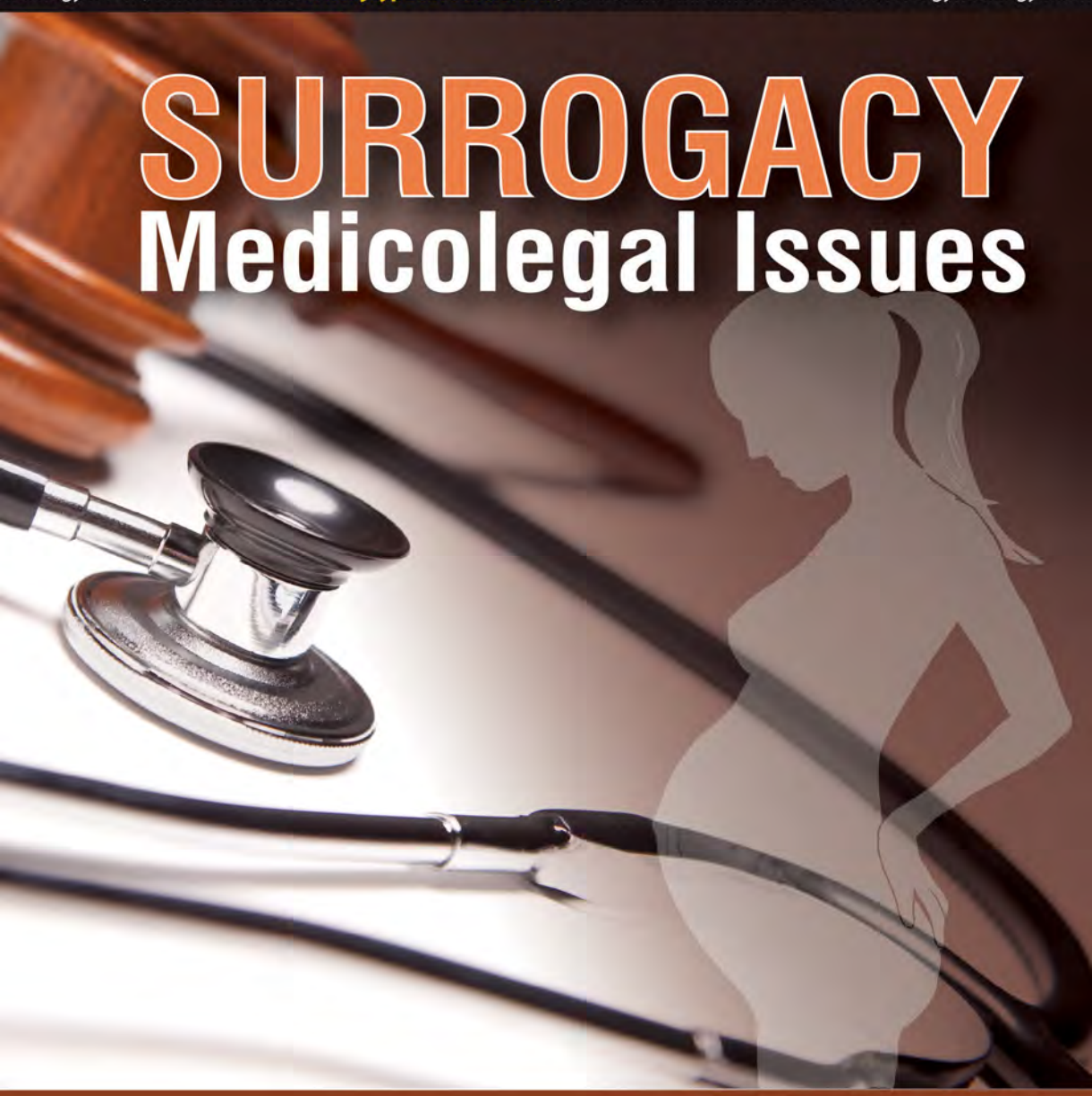
SURROGACY
Medicolegal Issues



Gehna Vaishnavi
Navneet Takkar

Foreword
Justice Rajiv Narain Raina

JAYPEE

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*This Bill was introduced by Dr Kirit Premjibhai Solanki (Member of Parliament, Gujarat).

History of Surrogacy

2

Gehna Vaishnavi

INTRODUCTION

Surrogacy has been in existence in the world for a very long time, even though its significant role has been noticed only recently. Surrogacy was traditionally prevalent even in India during ancient times and mythological epics written in India have shown the occurrence of surrogate pregnancies. In earlier times, women without at least a single functional fallopian tube were believed to be incapable of reproduction. Therefore reparative surgery or tuboplasty were conducted in women with damaged tubes in hopes of re-establishing a channel for the passage of the gametes for natural fertilization. However, regrettably, a lot of the times these surgeries failed. The advent of surrogacy has brought a drastic change in the arena of human reproduction. This chapter deals with the history of surrogacy since times immemorial.

HISTORY OF SURROGACY IN INDIA

The mythological story of the notorious King Kansa in ancient times best depicts the occurrence of surrogate pregnancies in India. It is believed that this cruel king had locked up his sister, Devaki and her husband Vasudev into a prison cell due to the fear of the prophecy forecasting his death at the hands of his sister's eighth son. King Kansa managed to kill the first six newborns of Devaki. Mythology describes that Devaki apparently had a miscarriage of the seventh child Balram, who in reality was secretly transmitted to the womb of Rohini by the will of God. The Bhagwad Gita contends that Lord Krishna—the eight son—is understood to have been born without a sexual union and was conceived by the divine 'mental transmission' from the mind of Vasudeva into the womb of Devaki. Likewise, it is believed that in the epic of Mahabharata, Gandhari, the wife of King Dhritarashtra who had conceived had a prolonged pregnancy for nearly two years. Bhagwan Vyasa described that at the end of this period Gandhari delivered a mass of material that contained 101 normal cells which after being put in a nutrient medium grew up full term as 100 male children—the Kauravas—and one female child, called Duhsheela. Thus, Indian mythology reveals that surrogacy was traditionally in vogue in India since times immemorial.

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Moving from the mythological era into the modern times, it is a matter of pride to the Indians that the world's second test-tube baby, Kanupriya Aggarwal fondly called as Durga, (Fig. 2.1) was born in India. The credit of this pioneering accomplishment goes to Dr Subhas Mukhopadhyay (also called by some as Subhas Mukherjee) who brought this girl into the world (Fig. 2.2). In this research, Mukhopadhyay (this is the name retained in this book for the sake of convenience) was assisted by Professor Sunit Mukherji and Professor Saroj Kanti Bhattacharya. It is learnt that Dr Mukhopadhyay started his work on this project at the same time as that by the British scientists, Robert G Edwards and Patrick Steptoe who are the creators of the world's first test-tube baby, Marie Louise Brown (Fig. 2.3). Durga, the Indian baby was born on 3 October, 1978, just 67 days after the world's first test tube baby was born on 25 July 1978 at Oldham General Hospital in England.

As reported in literature, Mr PK Aggarwal, the father of Durga had a low sperm count leading to infertility. Dr Mukhopadhyay treated Mrs Aggarwal with human menopausal gonadotropin (hMG) ampoules given twice a day and on alternate days and starting from day three through day nine of the cycle for ovarian stimulation. She was given 6000 IU of human chorionic gonadotropin



Fig. 2.1 Kanupriya Aggarwal (Durga), the first test tube baby of India



Fig. 2.2 Dr Subhas Mukhopadhyay, the pioneer of IVF in India

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Fig. 2.3 Professor Robert Edwards with Louise Brown, the first test tube baby

(hCG) on day 11 of the cycle and subjected to oocyte aspiration about 48 hours later, whereby Dr Mukhopadhyay was able to aspirate five follicles. In brief, Dr Mukhopadhyay, even without using a laparoscope collected the ova by performing a very simple operation on the wall of the vagina. Stimulated ova enlarge and drop down towards the Pouch of Douglas. By using hormones he increased the number of ova collected and developed an embryo *in vitro* which he placed in the womb of the intended mother. The methods of *in vitro* fertilization (IVF) and embryo growth are described in detail in Mukhopadhyay's letter dated 19 October 1978 to the Director of Health Services, Government of West Bengal, as well as in a publication in an obscure journal. In his concluding remarks Mukhopadhyay stated that for cryogenic preservation of embryos a relatively larger number of blastomeres (more than eight cells) may be preferable. Interestingly this pioneering work has today become the standard procedure for all women subjected to IVF.

But as luck would have it, this marvelous achievement was shrouded with ridicule and contempt. A so called 'Expert Committee' comprising of a radiophysicist, a gynecologist, a psychologist, a physicist and a neurologist was set up by the Government of West Bengal under the Medical Association. A meeting of this committee presided by the radiophysicist was called on 18th November, 1978 to decide over the fate of a 'convict named Dr Subhas Mukhopadhyay'. Apparently none of them had any knowledge about modern reproductive technology. Dr Mukhopadhyay was accused on several counts regarding his claim on this important innovation that could fight infertility. The charges were that Dr Subhas Mukhopadhyay claimed to be the architect of the first human Indian test tube baby, Durga. Secondly, that he announced the report to the media even before being cleared by the Government bureaucrats. Thirdly, that he made this impossible feat possible with only a few general apparatus and a refrigerator in his small southern avenue flat whereas other scientists although, having all the expensive resources in their hands could not even think of it. The fourth and the most important allegation was that he did not let his head down before the Government bureaucrats, inspite of his allegedly bogus claims.

During the meeting, Dr Subhas Mukhopadhyay was sternly asked, "Where did you keep these embryos?" To this he answered matter of factly, "In sealed

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ampoules." He was again questioned as to how he had sealed the ampoules. Flabbergasted, Dr Mukhopadhyay could only utter "Pardon?" This led to a completely meaningless and heated argument with sardonic remark, "Oh! Embryos do not die while sealing?" The constituent members of the Committee had never ever seen embryos in their lifetime yet they delivered their final report that all Dr Mukhopadhyay alleged was false and counterfeit. Then onwards the atmosphere with every passing day was charged with an insulting silence. It was plainly evident that his straightforwardness gave rise to immense professional jealousy.

To add insult to injury, Dr Mukhopadhyay was not allowed to carry out further work on IVF and was transferred away from Calcutta (now Kolkata) to the Institute of Ophthalmology as Professor of Electrophysiology — a department where he could not work on hormones. He was also not permitted to present his findings in a Tokyo conference which he intended to participate. Perturbed by the ridicule he received for his hard work and being unable to cope up with his deteriorating health, Mukhopadhyay finally decided to quit the world and killed himself by hanging on June 19, 1981.

A great injustice was done to medical science because his contemporaries were doubtful of his great achievement. Despite this, scientific records maintained that 'Harsha' who was born on 16 August 1986 was the first human test tube baby of India. Dr TC Anand Kumar, Director of Institute of Research in Reproduction from Indian Council of Medical Research (ICMR) New Delhi, was credited for this achievement. This eminent scientist once mentioned in a journal under the title 'A critique of Mukherjee's technique' that the brief description given by the doctor in his letter dated 19 October 1978 to the Director of Health Services, Government of West Bengal, the reports he gave over the television interviews and in the lay press describe how Mukhopadhyay carried out the procedure of IVF. However in 1997, while participating in a Science Congress at Calcutta (now Kolkata), he was handed over all the research documents of Mukhopadhyay, which after meticulous scrutiny and discussions with Durga's parents, he realized that the architect of the first human test tube baby in India was the unsung hero— Dr Mukhopadhyay! It was due to Dr Kumar's efforts, that ICMR recognized the work of Dr Mukhopadhyay in 2002 for the first time.

In the report related to the subject of artificial reproduction to the ICMR, TC Anand Kumar declared that Mukhopadhyay was the rightful creator of the first Indian test tube baby, Durga. On her 25th birthday in 2003 which was also the silver jubilee year of IVF in India, she was honored in Bangalore (now Bengaluru) at a big conference on IVF that Dr Kumar had organized. There she first exposed her identity in front of the media and proudly spoke about her creator and proved once again that her creator's claims were not false.

Finally after 27 years of his death the ICMR acknowledged the contribution of Dr Mukhopadhyay and credited him as the creator of India's first test-tube baby! Even the International scientist community has accepted Dr Mukhopadhyay's achievement by inclusion of the report in the prestigious five-volume, '*Dictionary of Medical Biography*' published by the US-based Greenwood Printers. This dictionary enlists names of 1100 medical scientists from 100 countries around the world for their path breaking contributions to medical science. Durga, the first Indian test tube baby is overjoyed that justice has finally been done to her scientific father. Tracking her life, it is heartening to learn that she attained the

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degree of Master of Business Administration from Symbiosis Institute, Pune and worked as a Marketing Executive in a Multinational Company in Delhi and now finally has settled down in a business company of her own.

In vitro Fertilization Techniques used by Mukhopadhyay

Mukhopadhyay carried out his version of IVF and embryo transfer as follows: Initially incubation of the freshly aspirated oocytes for four hours was carried out. The processing of the husband's semen was done in protein-supplemented Tyrode's solution for 'sperm activation'. Next the incubation of the oocytes was done with the processed semen for a period of 24 hours and later incubated for another 72 hours in a mixture of cervical-uterine fluids. The use of a synthetic fluid, similar to that found in the human fallopian tube, has been found to be useful for *in vitro* embryo culture procedures. As mentioned in his report, 'Few preovulatory human oocytes collected from a married woman by surgery were fertilized with spermatozoa from the husband and cleaved *in vitro* and subsequently frozen slowly to about 196°C after stepwise treatment with dimethyl sulfoxide. One such frozen embryo was subsequently thawed slowly and when transferred into the uterus of the woman apparently resulted in the production of a clinically normal female baby after normal period of gestation'.

The cryopreservation of embryos from mice, rabbits, sheep and goats were frequently reported during the seventies. By 1981 the first report on the successful cryopreservation of four to eight cell human embryos was announced. Next, in 1983 Trounson and Mohr reported the first successful clinical outcome of the transfer of thawed human embryos. A World Health Organization report states, "Embryo cryopreservation has now become a routine adjunct to IVF procedures, and various methods of freezing are employed. The method that has yielded the best results in terms of simplicity, efficiency and reproducibility is one that involves freezing of one to three-day-old embryos (one to eight-cells) in a controlled biological chamber that cools the embryos to sub-zero temperatures in the presence of a cryoprotectant *viz*. 1, 2 propanediol, dimethyl sulfoxide and glycerol. Subhas Mukhopadhyay reported as early as in 1978 the successful cryopreservation of an eight cell embryo in dimethyl sulfoxide storing it for 53 days, thawing and replacing it into the mother's womb, resulting in a successful livebirth. This small publication of Mukhopadhyay in 1978 clearly shows that he was on the right line of thinking much before anyone else had demonstrated the successful outcome of a pregnancy following the transfer of a eight-cell frozen-thawed embryo into human subjects.

HISTORY OF SURROGACY ABROAD

Surrogacy in Western culture dates back to as far as the Bible, with Abraham and Sarah. When Sarah had trouble conceiving, she asked her maid, Hagar, to become a surrogate mother for her and carry Abraham's child. This worked out well for them and later on, they had children of their own.

The potential of IVF as a treatment for infertility was recognized as early as the 1950s by Robert Edwards, working at the National Institute for Medical Research in London. He had carried out pioneering research over several years in animal reproductive biology using the mouse model. This came of great help

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in achieving the objective to translate the results for human use. Edwards made a number of fundamental discoveries. He was able to elucidate how human eggs mature, how different hormones regulated their maturation and at which point in time the eggs were susceptible to fertilization. After several years of work, Edwards also succeeded, in 1965, in finding the right conditions that activated *in vitro* the dormant and immature egg cells and promoted their maturation. Earlier it was believed that in mammalian IVF, maturation required only a few hours of cultivation *in vitro*. However, Edwards found that human oocytes required 24 hours of incubation before the maturation process began and that this prolonged cultivation resulted in egg cells at a late developmental stage, which were suitable for IVF.

The work by Chang-Yanagimachi at Worcester Foundation for Experimental Biology in Massachusetts on hamster eggs indicated the possibility of finding suitable conditions for the fertilization of human oocytes *in vitro*. Edwards received assistance in his endeavor by the work of his student, Barry Bavister at Cambridge University. The latter in 1969 had developed the buffer conditions to support *in vitro* activation of hamster oocytes. Using the same buffer conditions, Edwards showed that human spermatozoa thus activated could also promote the fertilization of *in vitro*-matured oocytes, marking an important milestone in the development of treatment for infertility in humans. However the limitation in this technique was that matured and fertilized eggs could not progress beyond the two-cell division stage due to the lengthy periods that the matured egg cells had to spend outside the body. Edwards therefore decided to use oocytes that had completed their maturation process *in vivo* with the belief that retrieval of oocytes from the ovaries just before the onset of ovulation would make them more competent in developing into embryos and thus become useful for IVF treatment.

With his prior experience on mouse reproductive biology, Edwards was aware that the initiation of meiotic maturation of the egg cells could actually be controlled by externally administered gonadotropins, the hormones that carry out the role of the internally acting luteinizing hormone. He conducted some *in vitro* studies on human oocytes which helped him to calculate the timing of the meiotic maturation process.

Edwards moved to Cambridge University for further research on this new hypothesis. However he was bogged down by an important technical problem as to the retrieval of an adequate number of oocytes from the ovary at the correct stage of development. During that point of time, oocytes could be accessed only through the surgical removal of a small part of the ovary from infertile women. Edwards was aware that this was not appropriate for IVF. A new technique of laparoscopy pioneered by Patrick Steptoe came to his rescue. This technique allowed the human female reproductive tract to be seen through a fiber-optic endoscope inserted through an incision near the navel. By this method, oocytes could be successfully aspirated from the ovary at the appropriate developmental stage during a suitable period of the menstrual cycle. In 1970, Edwards joined Steptoe in demonstrating that mature preovulatory oocytes could be retrieved after priming the ovaries with gonadotropins. By means of this technique, the workers were able to carry out IVF of preovulatory oocytes with *in vitro*-activated sperm that resulted in eight-cell-stage human embryos. For the first time, it was

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shown that it was possible for human embryos to undergo cell division *in vitro*. This important finding was reported in *Nature* in 1970. A year later, they further demonstrated that IVF human oocytes could divide to form 16-cell-stage embryos and *in vitro* blastocysts, which are thin-walled hollow structures containing a cluster of cells with already differentiated cell types.

But this promising achievement was denied funding by the United Kingdom's Medical Research Council when criticisms by the medical fraternity on the safety of the embryos poured in. Luckily however, this important phase in IVF development was sustained through private donations.

In the early 1970s, Edwards and Steptoe relocated the IVF embryos back into intended mothers, resulting in short-term pregnancies that ended in spontaneous abortions in at least over a hundred attempts. These workers then altered the hormone treatment protocol believing that it disturbed the implantation of embryos in the uterus. The first successful pregnancy occurred in 1976 but the embryo was implanted in the fallopian tube, i.e. outside the uterine cavity and therefore the pregnancy had to be ended. Edwards and Steptoe abandoned the hormone treatment altogether and instead decided to rely only on the natural menstrual cycle of the patient, meaning thereby the possibility of harvesting only a single egg per cycle. On the basis of the concentration of luteinizing hormone in the urine of the women they could accurately predict when the appropriate developmental stage of the oocyte would occur. Using laparoscopy these scientists would try to retrieve the egg before the occurrence of ovulation. Their hard work paid dividends in 1978 with the historic achievement of the successful birth of a normal, healthy baby, Marie Louise Brown on July 25, 1978, after a full-term pregnancy through IVF of a human oocyte.

Nearly three decades of persistence, commitment and belief by these tireless workers led to the advent of a new era in the treatment of infertility. This thumping success encouraged Edwards and Steptoe to establish an infertility clinic at Bourn Hall in Cambridge, where they developed the IVF technique further. As a result of this emerging field rapid technical development followed in other parts of the world too. Soon the laparoscopic recovery of oocytes was replaced by the ultrasound-guided oocyte recovery method and the cryopreservation of surplus human embryos. Ova collection for IVF using laparoscope was a difficult process during the earlier times. Later on the introduction of ultrasonography brought about a new possibility to aspirate oocytes transvesically under ultrasound guidance. For this a percutaneous insertion of a long needle traversing the abdominal wall, the urinary bladder and finally the ovarian follicle was made. Successful IVF of *in vitro*-matured human oocytes was also reported in 1994. The next success in IVF treatment was the development of the technique of intracytoplasmic sperm injection where a single sperm is microinjected into the cytoplasm of a mature egg. This important breakthrough has facilitated the treatment of many categories of male infertility also.

The work of Edwards has been helpful in other later work leading to the derivation of human embryonic stem cells, important for the understanding of cellular differentiation. The IVF method has also led to the development of pre-implantation genetic diagnosis, an *in vitro* procedure on fertilized early embryo cells that reduces the risk of genetic disorders or chromosomal abnormalities being transmitted to the offspring and is fast emerging as a medical therapy.

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The interference with a natural biological process results in ethical issues. Improper adherence to treatment protocols and ethical regulations, such as the practice of transferring two or more embryos into the uterus and perhaps also because of the generally older age of women undergoing IVF complications may develop. Edwards himself initiated a debate on many of the issues that would arise in assisted reproduction. The issue was highlighted through a key paper that he co-authored with a lawyer, David Sharpe, Realizing the importance of ethical considerations in IVF treatment he created an Ethics Committee at Bourn Hall and established strict ethical guidelines for research and treatment using human germ cells and embryos.

It has been found by several follow-up studies, that children born from IVF treatment are, in general, as healthy as those born through normal conception. About, 20–30% of fertilized eggs lead to the birth of a child in an IVF treatment. However the complications from IVF are the possibility of multiple births, an increased risk of major malformations twofold increased risk of a preterm birth, and a slightly increased frequency of two rare genomic imprinting disorders. Nonetheless the discovery of IVF technique by Edwards, followed by several improvements on it, marks a major medical advance and a well-known therapy today that has become a boon to infertile people all over the world. Edwards had received Albert Lasker Award for clinical medical research in 2001 and was conferred the Nobel Prize in the year 2010 for his pioneering work. He was also knighted in 2011 by Queen Elizabeth for his services to human reproductive biology.

In Britain, Australia and USA until December 1980 conservative mentality asserted that stimulated cycles were unsuitable for oocyte collection and therefore oocyte aspiration was restricted to natural cycles. However in 1981, the Australians announced the birth of IVF babies using clomiphene citrate for ovarian stimulation. In 1982, the Norfolk group in the USA, third in line reporting the birth of an IVF baby, used hMG and hCG with success.

Surrogacy has indeed become a boon for infertile couples. From 1976 to 1988, approximately 600 babies were born through surrogacy. Between 1988 and 1992, this number swelled to over 5,000 births. In the United States alone the number of babies born from surrogate mothers has continued to rise throughout the last two decades, with thousands of babies born every year.

HISTORY OF SURROGACY ARRANGEMENTS

Surrogacy arrangement is basically a private matter. Biblical reference to surrogacy arrangements includes that of Sarah and Rachel. Less known surrogacy arrangements dates back to 1500 BC and are found among the artifacts of the Hurrians of Mesopotamia. Surrogacy was practiced in the Greek society as early as the 4th century BC and in medieval Tuscany preserved from around the year AD 1500, gives another perspective of surrogacy. A small reference to surrogacy as antiquity's common sense remedy to childlessness comes from the longest intact personal inscription that survives from ancient Rome. However no descriptive details of the ancient surrogacy arrangements are available. The first reports of various kinds of surrogacy arrangements done as a part of clinical treatment are as here under:

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First paid traditional surrogacy arrangement: In 1980, Elizabeth Kane (assumed name) created history by being the first paid surrogate mother who gave birth to a child in the traditional way. She received $10,000/- as remuneration for the successful delivery of the baby. This first-ever recognized traditional surrogacy heralded the beginning of changes in surrogacy arrangements. After the birth of the child, Elizabeth Kane regretted her decision of being a surrogate mother and later on campaigned against surrogacy. She wrote about her experiences as a surrogate mother in a book titled, 'Birth Mother' where she described the emotional difficulties she had experienced and also the agony her family suffered due to the surrogacy arrangement. Her children were teased and humiliated and her husband faced difficulties in his career which resulted in a lot of suffering by the family in their social lives.

First menopausal surrogacy *via* egg donation: At Monash University, Australia in 1983, a menopausal woman was the first mother to give birth to a baby using donated eggs proving that surrogate pregnancy is possible even in menopausal women. This experience as well as the above instance was the initial basic important steps that led to the ground-breaking advent of surrogacy industry which has taken the present shape.

First gestational surrogacy arrangement: A couple of years later in 1985 a surrogate mother gave birth to the biological child of a hysterectomized woman who luckily had preserved her ovaries. This was the first gestational surrogate pregnancy which indeed was a landmark epic in the history of surrogacy.

First oldest surrogate mother: In 2001, a grandmother, Vivien Morris, aged 54 became the first oldest surrogate mother in the world. However this record has since been broken. Laura, the daughter of Vivien could not have children of her own after a cancer operation. So Vivien gave birth to her own grandchild, Maisie.

First multiple births by surrogate mother: Quintuplet boys were born on April 26, 2005 to 54 years old Teresa Anderson who served as a gestational surrogate mother to a couple she met online. The biological mother, Luisa Gonzalez, and her husband were combating infertility for over a decade. However when Teresa found out that she was carrying quintuplets, she waived off her $15,000/- compensation arrangement realizing that the biological parents would be more in need of the money than she herself to raise their boys.

First oldest surrogate mother to twins: In August 2007, a 58-year-old woman, Ann Stopler from America gave birth to her own twin grand daughters Itai and Maya. The twins were delivered by cesarean section six weeks early. Her own daughter, Caryn Chomsky, was unable to conceive due to cervical cancer. Caryn had a hysterectomy and surgeons also performed an "ovarian transposition," carefully repositioning Caryn's ovaries out of her pelvic area into her abdominal cavity. This way they could give her the radiation she needed for the cancer without damaging her ovaries. Caryn's eggs were thus saved.

First oldest surrogate mother to triplets: In 2008, 56-year-old Jaci Dalenberg became the first oldest woman to give birth to triplets. She delivered her own grandchildren by becoming a gestational surrogate mother for her daughter, Kim.

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First oldest surrogate mother in Japan: A Japanese woman gave birth to a child she had carried for her daughter who was hysterectomized due to cervical cancer and was therefore unable to conceive. But fortunately doctors were able to use her eggs. In spite of being in her early sixties she became the oldest surrogate mother in Japan, who gave birth to her own grandchild at the age of 61 years. In fact it was the first time in Japan that a woman became a surrogate for the child of her own daughter, successfully delivering her own grandchild. Despite surrogacy being frowned upon in Japan, this unusual case occurred in the country.

First surrogate pregnancy in Britain: Surrogacy is legal in Britain as long as it is unpaid - although surrogate mothers can claim "reasonable" expenses, sometimes up to £10,000. The first British woman to go through the surrogacy procedure was Edith Jones aged 51. In 1991, she gave birth to a girl, the child of her daughter Suzanne Langston, who was born without a womb.

CONCLUSION

The history of surrogacy has been a long journey. The traditional surrogacies of centuries past which were kept in wraps have now changed to family members acting as surrogate carriers. Surrogacy is a new age phenomenon which is gaining support in India after its success world over. For instance celebrities like Aamir Khan obtained a child through surrogacy aided by IVF. Now recently superstar Shah Rukh Khan had his third child through surrogacy. Commercial surrogacy is now being openly practiced. Though Robert Edwards, the pioneer of IVF died recently on 10 April 2013, his discovery of first test tube baby providing the basis for genetic screening and stem cell research will go a long way in fulfilling the dreams of aspiring parents. It will be interesting to see what will happen to the history of surrogacy during the next few decades.

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SURROGACY
Medicolegal Issues

The advent of assisted reproductive technology has given a boost to surrogacy and further strengthened its roots. Surrogacy has changed the way the family is viewed today. The issue of surrogacy is an affliction of the entire world, the manifestation of which has resulted in formation of laws universally. The Indian judicial system has given landmark judgments even though surrogacy laws in India are on the anvil. The sole objective to create the book was to bring in clarity in relation to laws surrounding surrogacy.

Surrogacy: Medicolegal Issues, written by both an advocate and a doctor, contains the judicial pronouncements of eminent jurists around the globe in relation to surrogacy. The book reflects the medicolegal issues affecting surrogacy, which, in turn, has an impact on the social fabric of our country. The book highlights in general the exploitation of not only the surrogate woman but of the intending couples as well, who are struggling to have children without concern of the consequences. The law as studied in the book provides significant safeguards on different aspects of surrogacy and will help to make a right decision. The book includes foreign judgments and Indian judicial precedents which will help to deal with this issue. It will also be informative for the development of statutes in India.

Gehna Vaishnavi is working as a Lawyer with Punjab and Haryana High Court. She is also central government counsel. She has represented several cases in the High Court and other subordinate courts. At present, she is also in the panel of the Union of India. She has widely traveled and has been contributing scholarly articles to the newspapers.



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