

Surrogacy - a worldwide demand. Implementation and ethical considerations

Adrian Ellenbogen, Dov Feldberg, Vyacheslav Lokshin

¹ Bruce and Rappaport School of Medicine, Technion-Israel Institute of Technology, Haifa, Israel. Kupat Holim Meuhedet, Tel Aviv, Israel; ² Sackler Medical School of Medicine, Tel Aviv University, Schneider Hospital for Women-Rabin Medical Center, Petach Tikvah, Israel; ³ Kazakh National Medical University of Kazakhstan, Almaty, "Persona" International Center of Reproductology, Almaty, Kazakhstan

ABSTRACT

Background: Surrogacy is a treatment option available to couples with certain medical difficulties, in order to help them have their own genetic children, to single women with medical problems desiring pregnancy, or to homosexual men wishing to become parents. There are two forms of surrogacy. In the first (traditional surrogacy), the surrogate mother's own egg cell is used to conceive the child. In the other (gestational surrogacy), there is no genetic relationship between the surrogate mother and the child, and the technique relies on *in vitro* fertilization (IVF) of the intended genetic mother's ovum, or that of a third-party donor, with her partner's sperm or donor sperm. IVF allows the creation of embryos from the gametes of the commissioning couple and subsequent transfer of these embryos (fresh or frozen/thawed) to the uterus of a surrogate host. The indications for treatment include absent uterus (congenital or after hysterectomy), recurrent miscarriage, repeated failure of IVF, and certain severe medical problems. The results of treatment are more than satisfactory, with up to 60% of surrogate mothers achieving live births. Surrogacy may be commercial or altruistic, depending upon whether or not the surrogate receives economic remuneration for her pregnancy.

Ethical, religious and legal problems have arisen around surrogacy; therefore, it is imperative that both the gestational carrier and the intended parent(s) be granted rigorous safeguards and protections.

Purpose: In many countries around the world clear and understandable gestational surrogacy arrangements are carried out or strict legislations were introduced. This article looks at ethical considerations and the implementation of legislation by different countries around the world.

KEYWORDS

Surrogacy, IVF, gestational carrier, infertility.

Introduction

Surrogacy means that a woman becomes pregnant and gives birth to a child with the intention of giving this child to another person or couple, commonly referred to as the "intended" or "commissioning" parents^[1]. A surrogate mother is the woman who carries and gives birth to the child, and the intended parent is the person who is going to raise the child. The definition by the European Society for Human Reproduction and Embryology (ESHRE)^[1] does not state the sexuality of the intended parents. Surrogacy can take one of two main forms: gestational surrogacy (high-tech surrogacy), where the surrogate is the birth mother but not the genetic mother of the child; or traditional surrogacy (low-tech surrogacy), where the surrogate is both the birth mother and the genetic mother. Gestational surrogacy relies on *in vitro* fertilization (IVF) of gametes that can originate from the intended parent(s) and/or a third party (or parties) to be transferred into the surrogate uterus. The surrogate woman who will carry the pregnancy enters into an agreement that she will give the offspring to the intended parent(s). In gestational surrogacy, the woman who carries the child (the gestational carrier) has no genetic connection to the child^[2]. Traditional surrogacy can take the form of a natural pregnancy, a pregnancy obtained by intra-uterine insemination, or a preg-

Article history

Received 04 Jan 2021 – Accepted 17 Feb 2021

Contact

Adrian Ellenbogen; ellenbogen55@gmail.com

Ass. Professor, Bruce and Rappaport School of Medicine, Technion-Israel Institute of Technology, Haifa, Israel. Kupat Holim Meuhedet, Tel Aviv, Israel.
Mailing Address: 20 Zamenhof Str. Herzliya, Israel. 4659220.

nancy accomplished by IVF. The surrogate provides the ovum, and the sperm is provided either by the intended father or by a third-party donor. The fertilized egg is the surrogate's own, making her the genetic mother of the child that will be born.

Surrogacy may be commercial or altruistic, depending upon whether the surrogate receives economic remuneration for her pregnancy. In commercial surrogacy, the surrogate is usually recruited through an agency, reimbursed for medical costs and paid for her gestational services. With altruistic surrogacy, the surrogate is found through friends, acquaintances or advertisement. She may be reimbursed for medical costs directly related to the pregnancy and for loss of income due to the pregnancy^[3].

The authors performed a detailed analysis of the existing legal frameworks regarding surrogacy in several European and non-European countries. Special emphasis is paid to the issue of surrogacy in Israel. Whenever available, references to official

books or newspapers, ministerial releases and recommendations are provided, as well as to publications in the “PubMed” database.

Indications for surrogacy treatment

The main indications for surrogacy treatment are congenital absence of the uterus and absence of the uterus in women who have had a hysterectomy for different reasons but who still have functioning ovaries. Müllerian aplasia and Mayer-Rokitansky-Kuster-Hauser syndrome, both of which cause congenital absence of the uterus, are relatively rare^[4]. Another indication is in the case of women who have suffered repeated abortions or undergone several IVF treatments with repeated implantation failure for no obvious reason^[5]. Certain medical conditions that might be life threatening for a woman during pregnancy (e.g., heart and renal diseases), are also indications for surrogacy, once it has been established that the future mother is healthy enough to take care of a child after birth and that her life expectancy is reasonable^[6]. In a recent publication, the indications for the treatment of 37 couples requiring treatment by IVF surrogacy at Bourn Hall Clinic, England, were: hysterectomy following cancer surgery (27%), congenital absence of the uterus (16%), post-partum hysterectomy (16%), repeated failure of IVF (16%), recurrent abortion (13%), hysterectomy for menorrhagia (5%), and severe medical condition (5%)^[6].

Surrogacy could be appropriate for same-sex male couples or single men^[7]. Gay men may choose to become parents via traditional surrogacy, conception occurring using the sperm of one of the intended fathers and the egg of the surrogate who carries the child to term^[8], or via gestational surrogacy, the most common type of surrogacy in the United States^[9]. The embryo is created using the sperm of one of the intended fathers and the egg of a donor and transferred to the surrogate. The surrogate who carries the pregnancy to term and gives birth has no genetic connection to the child. Uncertainties have been expressed regarding the bond created over time between gay families and the surrogate or egg donor. However, in gay father surrogacy families with young children, relationships between parents, children, surrogates, and egg donors were found to be generally positive^[8]. Despite the possibility of performing a surrogacy procedure for gay men, no legislation has been enacted regulating the procedure in any country^[10].

Religious considerations

The first ever report of a baby being born following treatment by gestational surrogacy was from the USA^[11]. However, it took more than a decade for the concept and possibility of surrogacy to spread through the world, mainly for ethical and religious reasons. In the Christian world, the Catholic Church is strongly against all forms of assisted conception, and therefore opposed to surrogacy. The Anglican Church is more flexible in its views and has not condemned the practice of surrogacy. Surrogacy is not forbidden in the Jewish religion, for which the child belongs to the father who provided the sperm and to the woman who gave birth. The Islamic view appears to be absolute in that

surrogacy is not acceptable — pregnancy should be the fruit of a legitimate marriage. If a woman did deliver, the child would be hers. Finally, while the Buddhist religion does not ban surrogacy, it takes into account family ties and moral considerations.

Concern about surrogacy agreements

Pregnancy and childbirth are deep, intimate and complex identity-related processes, which have significant physical and mental effects on the woman experiencing them. Surrogacy is a complex relationship which might be a fertile ground for harm and exploitation, and this must be recognized, especially when private organizations with financial interests are allowed to be involved. Disagreement has surrounded the practice of paid surrogacy since its beginning. Some feminist theorists were against paid surrogacy arguing that it constituted commodification of the body^[12]. Others have argued that such surrogacy is permissible, but only if the woman maintains the right to choose to end the pregnancy, as well as the possibility to cancel the agreement at any time^[13]. Some courts have followed this view^[14]. Others have argued that commercial surrogacy should be prohibited, deeming that it conflicts with the interests of the child^[15]. Defenders of more traditional family structures and methods of reproduction have claimed that the practice of surrogacy should be banned^[16]. Such positions and their implementation in different countries may lead couples to seek surrogacy services abroad. Where commercial surrogacy is prohibited, or where surrogacy agreements are unenforceable, intended parents may look to an authority where such arrangements are legally permitted or where the contract will be enforced. Regardless of how these disagreements are resolved, it is evident that certain protections for both the gestational carrier and the intended parent(s) are required for any form of surrogacy to be ethically acceptable.

Legislation in different countries

In 2005, an ESHRE task force on ethics and law issued the following statements: The indications for surrogacy will be absence of the uterus regardless of etiology, serious health risks for the intended mother, or difficulties in becoming pregnant. In addition: 1. Payment for services is unacceptable; only payment of reasonable expenses and compensation for loss of income should be considered. 2. All parties involved should be counseled and screened separately by independent specialists. 3. The surrogate should be aged <35 years for traditional surrogacy and <45 years for gestational surrogacy. 4. It is required that the surrogate have at least one child. 5. Only one embryo should be replaced in order to avoid multiple pregnancies and to prevent unnecessary complications to the surrogate’s and the future child’s health. In special circumstances, the replacement of a maximum of two embryos can be considered. 6. The commissioning parents should be well aware that the surrogate has the legal right to make decisions about her pregnancy against their will and against the original agreement. 7. A “cooling off period” is recommended so that all parties can think through

their decision. 8. Long-term follow-up studies, both of the resulting family and of the family of the gestating woman, should be conducted, especially to gain insight into the psychological impact of the arrangement on the child(ren)^[11].

Today, surrogacy is not officially allowed in Austria, Bulgaria, Denmark, Finland, France, Germany, Italy, Malta, Norway, Portugal, Spain, Sweden, Lithuania, People's Republic of China, Japan, Brazil, and Argentina. Altruistic, but not commercial, surrogacy is allowed in Belgium, Denmark, the Czech Republic, the Netherlands, the UK, Canada, and Australia^[17]. An extensive examination of national legal approaches to surrogacy was performed: Brunet *et al.*^[18] analyzed existing European Union law and the law of the European Convention of Human Rights to determine what obligations and possibilities surround national and transnational surrogacy. The study concludes that it is impossible to identify a particular legal trend across the EU, however all member states appear to agree on the need for a child to have clearly defined legal parents and civil status.

At present, surrogacy is legal in Greece and in Israel (legal with state approval). Ukraine, Russia and California (USA) permit commercial surrogacy, while in many states of the USA only altruistic surrogacy is acceptable^[17].

Surrogacy in the UK

The United Kingdom, like Canada, prohibits commercial, but not voluntary-altruistic surrogacy agencies, and forbids advertising for or about surrogacy. Only the commissioning couples and the host surrogate may initiate, negotiate or compile information to make surrogacy arrangements^[19]. Surrogacy agreements are unenforceable. Although the law around parentage in surrogacy is far clearer and more uniform in the UK than in Canada, the rules respecting legal parenthood can vary. Assisted reproduction in the UK is governed by the provisions of the Human Fertilization and Embryology Act (HFE Act) and regulation is handled by the Human Fertilization and Embryology Authority (HFEA). Parentage in gestational surrogacy is determined on the basis of the status provisions of the HFE Act. These provisions provide that the birth mother and her consenting spouse or same-sex civil partner are the legal parents of the child, whether or not they are genetically related to the child. If there is no father under the status rules — where, for example, the surrogate mother is single or where her spouse or partner does not consent to the assisted conception treatment —, the intended father can be considered the legal father of the child. It is clear that in gestational surrogacy, the intended parents are not the parents of the child at birth. Intended parents can seek what is called a Parental Order for adoption of the child. Until the Parental Order is approved, the future parents have no parental status and cannot make decisions regarding the child's welfare. To achieve a Parental Order, intended parents must meet several conditions: the application must be made at least six weeks but less than six months after the child is born; the birth mother and her spouse or partner must consent to the Order; at least one intended parent must be domiciled in the UK; the child must be in the care of the intended parents; at least one intended parent must be genetically related to the child and

the intended parents must be a couple (either married or civil partners). Finally, and very significantly in the international surrogacy context, the court must be satisfied that “no money or other benefit (other than for expenses reasonably incurred) has been given or received by either of the applicants for or in consideration of the agreement, handing over the child or making arrangements with a view to the making of the Order, unless the payment is authorized by the court”^[20].

Surrogacy in the Russian Federation

Surrogacy has never been illegal in Russia. Only gestational surrogacy is permitted. Surrogacy was mentioned in the Russian family code for the first time in 1995^[21]. The Russian family code states that intended parents may be listed on the birth certificate with the surrogate's consent only. This means that, at least theoretically, the surrogate can keep the child she gestated. However, after determining the genetic parents of the newborn, there will be no way to change the circumstance. The most important legislation in Russia dealing with surrogacy was adopted in 2011^[22]. Taking into consideration that the birth of a baby to a childless couple or a single parent transforms an individual into a family, Russian law tried to follow this principle. According to article 55-9 of this federal health law, surrogacy is defined as carrying and delivering a child according to conditions specified in an agreement that identifies the surrogate and the potential parents, whose fertilized gametes will be transferred into the surrogacy uterus. The option of surrogacy is also available to single women who are unable to carry and deliver a child for medical reasons. A surrogate mother must meet three main requirements; in addition to giving her written informed consent, she must be: 20-35 years of age, have at least one healthy child, and have obtained a medical report showing that she is healthy. A married woman can serve as a surrogate only with the permission of her husband, because in the event of his wife deciding to keep the child, he will become its legal father. The Russian law is unclear with regard to the use of the intended parents' gametes in a gestational surrogacy, i.e., it is not clear whether the child must be related to both parents or whether the gametes could be donated from an IVF clinic's cryobank (legal in Russia), without genetic link to the two parents or to a single woman^[23,24]. A maximum of two embryos may be transferred at one time to the surrogate. Yet, the surrogate may agree to transfer of three embryos after full informed consent including detailed information about the risks of multiple pregnancies and preterm deliveries^[21]. A surrogacy agreement can be implemented in Russia only in the presence of the same medical indications described earlier^[6]. From the financial point of view, payment to the surrogate mother is standardized at total of 20000 euro. Thus, the monthly salary of a gestational surrogate exceeds the average monthly income of the commissioning parents^[23,24]. Interestingly, the current federal health law neither allows nor bans surrogacy for individual males who wish to become a single parent. Although, to date, no single man has ever been considered as a patient with the right to be treated for infertility, technically, he might be eligible, having an absolute indication for surrogacy, namely congenital lack of

a uterus. Any child born to an individual male would be registered with a blank space in place of the mother's name, in the same way as a single woman who becomes a mother through surrogacy can register her child "to herself only" as the only parent ^[25]. Russia's liberal legislator framework on surrogacy makes the country attractive for reproductive tourists looking for techniques not available or much more expensive in their own country. Foreign patients are afforded the same rights as local citizens. If delivery in a gestational surrogacy program takes place in Russia, the commissioning parents obtain a Russian birth certificate with both their names on it. Genetic relationship to the child (in case of donation) just does not matter ^[26].

Surrogacy in Kazakhstan

Surrogacy has been a reality in Kazakhstan since 1998, when the law "On Marriage (Matrimony) and the Family" introduced a definition of "surrogacy" ^[27]. Despite some legal imperfections, in terms of the absence of a description of the rights and obligations of both surrogate mothers and customers, as well as of the rights of the child, this law facilitated the initiation of the first successful surrogacy program in the Center for IVF of the city of Almaty, which resulted in the birth of twins in 1999. In that surrogacy program, the patient's own sister acted as the surrogate mother.

With the introduction and update of The Code of the Republic of Kazakhstan "On Marriage (Matrimony) and the Family" ^[28] clear requirements for the regulation of surrogacy were introduced, where all parties, and especially the child, are protected, and rights and legitimate interests are guaranteed. The indications for surrogacy are regulated by Order No. 627 dated October 30, 2009 "On the Approval of the Rules for Implementation of Assisted Reproductive Methods and Technologies" ^[29] and they are similar to those described previously ^[6]. No more than 2 embryos can be transferred at a time to the surrogate mother.

The surrogacy agreement is a notarized written agreement between persons who must be married and willing to have a child and a woman who has consented to carry a pregnancy and give birth to a child through recourse to assisted reproductive methods and technologies. The surrogacy contract contains: the data of the spouses and of the surrogate mother; the instructions and conditions of payment of financial expenses for the maintenance of the surrogate mother; the rights, obligations and responsibilities of the parties in the event of non-fulfillment of the contractual conditions and the amount compensation.

A woman willing to be a surrogate mother must be aged 20-35 years, have satisfactory physical, mental and reproductive health, as confirmed by the opinion of a healthcare organization, and must also have a healthy child of the own. If a surrogate mother is married, the notarized agreement of her spouse shall be provided, in written form, during conclusion of the surrogate contract. The healthcare organization that will apply the assisted reproductive methods and technologies is obliged to state their opinion on utilization together with full information on the biological material to be used — be this material from these persons, willing to have a child, or donor material from a bank.

Unlike the Russian legislation, genetic parents are recognized as the parents of a child born as a result of the use of assisted reproductive technologies (ART) (surrogacy). A surrogate mother is obliged to transfer the child, once born, to the persons with whom she has concluded a surrogacy agreement. Also, of great importance for genetic parents, is the fact that the medical certificate a child's birth is registered in the maternity home in the name of the genetic mother; this allows the parents to have a birth certificate issued without unnecessary difficulties, preserving the secret of the child's birth. As a rule, the genetic mother simulates pregnancy, is present at childbirth and takes her child immediately after it is born, having fulfilled all obligations to the surrogate mother in accordance with the agreement. Upon the birth of the child, the genetic mother is granted paid *postpartum* maternity leave. The surrogate mother receives both prenatal and postnatal leave. The law provides for legal measures to protect the child. 1. Spouses are recognized as the parents of a child, born as a result of recourse to assisted reproductive methods and technologies on the basis of the surrogacy contract. In the event of the birth of two or more children as a result of application of such methods and technologies, or according to the surrogacy contract, spouses shall acquire liability for each child born in equal measure. 2. Any surrender of a child shall follow established procedures and take place after the registration of his (her) birth with a registering body by the spouses. In the case of surrender of a child by spouses who agreed to the application of assisted reproductive methods and technologies, or concluded the contract with a surrogate mother, the spouses shall not have the right to request compensation for the financial expenses incurred. In such a circumstance, the right to motherhood shall pass to the surrogate, but if she, too, surrenders the child, he or she shall be transferred to the custody of the state. In the case of surrender of a child by spouses and his/her adoption by a surrogate mother, the spouses shall be obliged to pay compensation in the amount and manner laid down in the contract. 3. In the event of dissolution of the marriage of the genetic parents, the responsibility for a child, born under the surrogacy contract, shall be divided between both partners. 4. In the event of death, the surviving spouse will take on the responsibility for the child born under the surrogacy contract. 5. In the event of death of both genetic parents and refusal of their close relatives to adopt a born child, this child may be transferred to the surrogate mother if she wishes; if she refuses, the child shall be transferred to the custody of the state. A child transferred to a surrogate mother or to the custody of the state shall not lose his (her) rights as heir of his (her) genetic parents ^[28].

The legislation of the Republic of Kazakhstan makes it possible to solve the issue of infertile marriage, but there are still unresolved issues of an ethical and a legal nature. Unlike the Russian laws, only a married couple can use surrogacy services, single persons cannot enjoy this type of assistance, even if there are medical indications ^[27].

Surrogacy in the USA

The remarkable changes in American family law with the developments in the use of ART led to proposed laws, such as the

sections of the 2000 Uniform Parentage Act as amended in 2002 (U.P.A.) law ^[30]. The U.P.A. “provides for a written agreement among the proposed gestational mother, her husband if she is married, the donor or donors, and the intended parents. In this agreement, the gestational birth mother, her husband if she is married, and the gamete donor or donors relinquish all rights and duties regarding the child to be produced by ART. The agreement also provides for the intended parents to be the legal parents of the child so produced. The U.P.A. provides that a court may approve an agreement if the intended parents and the prospective gestational mother (and her husband if she is married) have been residents of the state for at least 90 days. The agreement can include a provision for reasonable compensation to the prospective gestational mother. A hearing to validate the agreement must include the following findings: (1) that the residency requirement has been met and the parties have submitted to the jurisdiction of the court; (2) that there has been a home study of the suitability of the intended parents in conformity with the standards governing adoptive parents unless it is waived by the court; (3) that all parties voluntarily entered the agreement and understand its terms; (4) that adequate provision has been made for reasonable health care expenses until the birth of the child; and (5) that the compensation provided to be paid to the gestational mother (if any) is reasonable. After the court has approved the agreement but prior to the gestational mother becoming pregnant by ART, she (and her husband if she is married) or either of the intended parents can terminate the agreement by giving written notice of termination to all other parties. Neither the gestational mother nor her husband can be held liable to the intended parents for terminating the agreement. The court may terminate the agreement for good cause. If a party gives notice of termination, the court will vacate the order of validation. The U.P.A. states that after the birth of a child to the gestational mother, the intended parents shall file a statement of the birth with the court if the birth took place within 300 days of the assisted reproduction. The court will then issue an order confirming the legal parentage of the intended parents, if necessary, will issue an order for surrender of the child to the intended parents, and direct the issuance of a birth certificate naming the intended parents as the parents. If the intended parents do not report the birth to the court, the gestational mother or a state agency may do so. Upon proof that the court had validated the agreement, the court will enter an order declaring the intended parents to be the legal parents and that they are financially responsible for the support of the child” ^[30]. In 2013, the Ethics Committee of the American Society for Reproductive Medicine stated that intended parent(s) “are the individuals contracting with the gestational carrier and planning to be the social and legal parents of the child. “Gamete providers” are the sources of the sperm and oocytes; they may or may not be the intended parents. Gestational carriers have a right to be fully informed of the risks of the surrogacy process and of pregnancy. Gestational carriers should receive psychological evaluation and counseling. Gestational carriers should have independent legal counsel. Reasonable economic compensation to the gestational carrier is ethical. The intended parents are considered to be the psychosocial parents of any children born by a gestational carrier” ^[31].

Despite the above statements, surrogacy laws vary widely between American states. For instance, in California, the practice is

legal and regulated. California surrogacy laws require that both parties in a surrogacy agreement be represented by legal counsel when drafting a surrogacy agreement or contract. Any surrogacy contracts must be notarized or otherwise witnessed before the surrogate may take any medication in connection with the embryo transfer procedure. In California, neither a sperm donor nor an egg donor is a parent when their gametes are used in assisted reproduction and result in a child ^[32]. Other states have legislation dealing with surrogacy agreements; these laws vary as to the legality of such agreements, their enforceability, and whether compensation is permitted, or they make surrogacy agreements unenforceable, and rely on common law where custody is disputed.

Surrogacy in Australia

Commercial surrogacy is prohibited in Australia. Until quite recently, even altruistic surrogacy was forbidden in several jurisdictions; now it is permitted in most states. As it is difficult to find women willing to enter into surrogacy arrangements without compensation (and as advertising related to surrogacy is commonly outlawed), many Australians have sought surrogacy services in other countries. In three Australian states (New South Wales, Queensland, and the Australian Capital Territory), such surrogacy tourism has now been banned. Surrogacy contracts are not enforceable in Australia, although some states have provisions that enforce the obligation to pay surrogacy-related costs to the surrogate mother. In general terms, parentage law in Australia is similar to that in the UK. The surrogate mother and her partner are parents at birth, regardless of whether there is any genetic connection to the child. In addition, as in the UK, most states have a process whereby intended parents can obtain a court order declaring them legal parents. Statutory conditions attach to parentage orders, but the specifics vary by state. Very generally, the conditions include age and residency requirements for the parties, consent from all of the parties, terms that the agreement was made prior to conception and was not a commercial arrangement, and a conclusion by the court that the child’s welfare is best served by the order ^[20].

Surrogacy in South American countries

Surrogacy has not been regulated in Latin America. The views of South American societies and public opinion regarding ART and surrogacy have changed over time, but regulations and laws have been slow to adapt (mainly because of the preeminent role in the judicial system played by the traditional Catholic belief system). This creates complicated situations, as illustrated by the varying laws and case studies. South America, like other regions of the world, regulates or fails to regulate surrogacy arrangements, legislating on this issue in different and disparate ways, often in relation to whether the situation concerns a commercial or an altruistic surrogacy arrangement. Introducing and passing legislation on controversial topics, such as ART and surrogate motherhood, generates a huge amount of public debate and controversy, because a large segment of the population believes human procreation should be limited to the natural ways ^[33].

Surrogacy in Israel

Israeli law

In Israel, fertility and procreation are hugely important issues, both socially and culturally. There is no doubt that the cultural background of the Jewish and Muslim traditions and religions have a significant influence on Israeli society's attitude to these issues. There is also no doubt that the social pressure to allow legal and regulated surrogacy has led the State of Israel to be among the first countries in the world to enact a surrogacy law.

The surrogacy law in Israel was ratified in 1996, and ever since has enabled surrogacy to take place in Israel^[34]. By law, a man and a woman who are partners are entitled to find a surrogate alone or through a surrogacy agency, and to enter into a surrogacy contract with her. The surrogacy agreement is submitted to the Board for Approval of Surrogacy Agreements, which verifies the compatibility of the parties to the process: it checks that the surrogate is not entering the process out of “emotional or financial distress [and verifies the] emotional and physical and medical suitability” of all those involved in the procedure.

The law

The Surrogacy Agreements Law^[35] deals with the agreement between the intended parents and the surrogate mother, according to which the surrogate mother agrees to become pregnant through implantation of an egg fertilized with the intended father's sperm, to carry pregnancy on behalf of the intended parents, and to hand over the baby, after its delivery, to the intended parents. The law is intended for women of fertile age, Israeli citizens, aged up to 54, who are unable to become pregnant and carry a pregnancy, or who might severely put their health at risk should they become pregnant. The surrogate mother must be 22-38 years old and can undertake only three surrogacy procedures, however no more than two births, or delivered once and did not become pregnant afterwards after six embryo transfer cycles or did not become pregnant after six embryo transfer attempts on each process.

The Embryo Carrying Agreement consists of two parts: the first part deals with the surrogacy agreement. The second part deals with the status and parenting of the newborn. The law views the surrogacy agreement as an autonomously drawn-up contract by the parties working in the “free market”, but which must be put forward to an authorization committee for validation. The committee's task is to approve the agreement after ensuring that it meets the conditions laid down by the law and providing it is convinced that both parties signed of their own free will, and after establishing that no risks are posed to the mother's health or to the child's welfare. It was also decided that the committee has the authority to approve conditions for the surrogate mother regarding “monthly payments to cover considerable expenses and to recompense for wasted time, suffering, loss of income or temporary loss of working ability or any other reasonable compensations”. The Board considers the documents submitted to it, hears the parties to the agreement as required, and is entitled, as per its judgment, to require any additional material from the parties and to hear any additional person. The Board approves the surrogacy agreement after being satisfied that the conditions, as they appear in Section 5 (a) of the law, are satisfied.

Composition of the Board

The Board comprises: two physicians who are certified specialists in obstetrics and gynecology; a physician who is a certified specialist in internal medicine; a clinical psychologist; a social worker; a public representative who is a jurist; and a clergyman, as per the religion of the parties to the agreement. The surrogate mother cannot pull out of the surrogacy agreement, unless a “genuine change occurs to justify this” prior to the issue of the parental order. The law forbids a family member of one of the intended parents serving as the surrogate mother, as well as “traditional surrogacy”, where the surrogate mother is genetically related to the fetus. The law states that the sperm used for IVF may come from the intended father only and that the embryo carrying agreement cannot include clauses which preclude the surrogate mother from receiving any medical treatment of her choice, including abortion. The law allows heterosexual couples with legal couple status to use surrogacy. By the end of 2017, of 1458 applications, 1450 had been approved according to the law, and 823 children had been born through surrogacy^[36].

In 2018 the surrogacy law was extended to single intended mothers, who can turn to surrogacy provided their own eggs are to be used (meaning that these mothers have a genetic relationship with the baby that will be born). So far, homosexual couples are not allowed to use the procedure^[36].

Surrogacy in Iran

In a very interesting description of surrogacy in an Islamic country^[37], it was affirmed that gestational surrogacy is being practiced in some medical institutions in Tehran, and in some other cities in Iran and stated that most “Shiite scholars, but not Sunni, have issued jurisprudential declarations (fatwas) that allow surrogacy as a treatment for infertility”. The main ethical concern with surrogacy in Iran is of a financial nature. Even though monetary compensation is allowed by religious authorities, this has ethical implications. The author suggests that economic agreements should be limited to reimbursement to the surrogate mother of her expected expenses.

Pregnancy complications and delivery rates after surrogacy treatment

In gestational surrogacy programs, clinical pregnancy rates per embryo transfer have been reported to range from 19 to 33%, with between 30 and 70% of couples achieving clinical pregnancy going on to become parents^[17]. In a recent retrospective study, 178 pregnancies were achieved out of 333 stimulation cycles, including fresh and frozen transfers. The mean age of the gestational carriers was 31.8 years (range 21-44). The indications for surrogacy were as follows: in 96 women, with a mean age of 40.3 years, recurrent implantation failure, recurrent pregnancy loss, and previous poor pregnancy outcome (132 cycles, pregnancy rate 50.0%, miscarriage rate 25.8%, and birth rate 34.8%); a further 108 women, with a mean age of 35.9 years, suffered from severe Asherman's syndrome, uterine

malformations/uterine agenesis, or maternal medical diseases (139 cycles, pregnancy rate 54.0%, miscarriage rate 20.0%, and birth rate 40.3%). Maternal complication rates were low, occurring in only 9.8% of pregnancies. Fetal anomalies occurred in only 1.8% of the babies born [38,39]. Moreover, another study found that up to the age of 10 years there were no major psychological differences between children born after surrogacy and children born after other types of ART, or after natural conception [39,40]. In studies which assessed contact between the surrogate mother and the intended mother/family, in the vast majority of cases contact was harmonious and regular, both during pregnancy and after birth [41,42]. Psychological personality tests performed in surrogate mothers were found to be in the normal range [43]. Follow-up studies show that, generally, surrogate mothers had no significant difficulties handing over the children to the intended parents [41,44].

Discussion

Infertility is a disorder that is affecting an increasing number of couples and individuals around the world, and it is recognized by World Health Organization as a disease affecting the well-being of person(s) who suffer from it. The development of modern medical technologies, together with growing understanding and awareness of the psychological impact of infertility, has led to the development of new ways of solving the problem, such as surrogacy.

Surrogacy and the demand of surrogacy are processes with complex moral implications. The surrogate undergoes complicated and health-threatening medical processes, including pregnancy, IVF, and hormonal therapies. In addition, in some surrogacy agreements, the surrogate abandons components of her normal life by agreeing to strict supervision of her lifestyle during pregnancy. At the end of the procedure, she hands over the newborn to the intended parents, a practice that, under other circumstances and without proper legal regulation, would be prohibited on the grounds of constituting infant trafficking. These aspects have led various countries around the world to ban surrogacy procedures in their territory, and they have been kept very much in mind when developing the Israeli initiative and law geared at increasing awareness of surrogacy processes and ensuring they are carried out ethically. On the other hand, it has been argued that surrogacy does not need to be treated as a practice that may lead to the exploitation of surrogates (mainly of poor and deprived women ready to trade their uterus for a recompense, even without getting proper medical surveillance or rights) providing there are mechanisms in place that preserve the surrogate's free will. As more and more opinions have been voiced on these issues, countries around the world have been led to ratify guidelines that regulate the issue in various forms. In many countries, surrogacy is completely forbidden. In other countries it is allowed, but with different restrictions.

Surrogacy arrangements in different countries try to deal with agreed-upon moral principles, which may be violated during the surrogacy procedure, and also to embody the effort to balance the rights of the surrogate with the rights of the parents assisted by the surrogacy arrangement. In the UK and Cana-

da, for example, surrogacy services may not be advertised, and wages cannot be paid for them — although the law allows for coverage of expenses, without specifying amounts [44]. However, given the social pressure to amend existing surrogacy guidelines and adapt them to the requirements of the population, the UK is partway through a multiyear process of revising its law on surrogacy, both traditional and gestational [45,46]. Unlike other countries, in Israel, surrogacy is allowed and reinforced by the law (that takes into account the wellbeing of the surrogate, the commissioning parent(s) and the child to be born), as a voluntary act only. Though the mother is entitled to receive reimbursement for hospitalization, tests and other expenses associated with pregnancy and childbirth, the standard amount payable to surrogates is not fixed by law, but simply defined as any reasonable compensation. The exact amount that the surrogate receives must be written in advance in the agreement between her and the intended parents, and in addition must be approved by the approval committee of the Ministry of Health [35,36]. At the same time, efforts must be made at international level to reach a consensus on the issue of surrogacy by enacting laws or at least clear regulations on the preservation of the reproductive rights of all those in need.

Conclusions

Clearly, surrogacy is an issue that raises deep ethical and religious problems and considerations. Normally, a person who wants a child accepts the medical risks of pregnancy. In surrogacy arrangements it is the carrier that takes the risks. However, as a result of growing demand from couples who cannot conceive on their own, together with the technological developments of IVF, in addition to acceptance and readiness of women to take part in the process of surrogacy as surrogate mothers, the practice appears to be spreading to more and more countries around the world. However, rigorous safeguards and protections need to be in place, both for the gestational carrier and the intended parent(s). Therefore, the state where the process of surrogacy is performed has as an obligation to provide clearly defined rules to enable the existence of a fair relationship which will benefit all participants. It also has an obligation to ensure the practical implementation of these rules and to conduct a long-term follow-up of all participants in the procedure, to make sure that no party suffers long-term harm. The Israeli law on surrogacy is an excellent example of how these principles can be applied in a way that enables solution of most of the legal and ethical issues surrounding surrogacy.

References

1. Shenfield F, Pennings G, Cohen J, Devroey P, de Wert G, Tarlatzis B; ESHRE Task Force on Ethics and Law. ESHRE Task Force on Ethics and Law 10: surrogacy. *Hum Reprod.* 2005;20:2705-7.
2. Zegers-Hochschild F, Adamson GD, de Mouzon J, et al; International Committee for Monitoring Assisted Reproductive Technology; World Health Organization. International Committee for Monitoring Assisted Reproductive Technology (ICMART) and the World Health Organization (WHO) revised glossary on ART terminology, 2009. *Hum Reprod.* 2009;24:2683-7.

3. FIGO Committee for Ethical Aspects of Human Reproduction and Women's Health. FIGO Committee Report: Surrogacy. *Int J Gynaecol Obst.* 2008;102:312-3.
4. Lindenman E, Shepard MK, Pescovitz OH. Mullerian agenesis: an update. *Obstet Gynecol.* 1997;90:307-12.
5. Practice Committee of the American Society for Reproductive Medicine; Practice Committee of the Society for Assisted Reproductive Technology. Recommendations for practices utilizing gestational carriers: a committee opinion. *Fertil Steril.* 2015;103:e1-8.
6. Brinsden PR. Gestational surrogacy. *Hum Reprod Update.* 2003;9: 483-91.
7. Dempsey D. Surrogacy, gay male couples and the significance of biogenetic paternity. *New Genet Soc.* 2013;32:37-53.
8. Blake L, Carone N, Slutsky J, Raffanello E, Ehrhardt AA, Golombok S. Gay father surrogacy families: relationships with surrogates and egg donors and parental disclosure of children's origin. *Fertil Steril.* 2016;106:1503-9.
9. Perkins KM, Boulet SL, Jamieson DJ, Kissin DM; National Assisted Reproductive Technology Surveillance System (NASS) Group. Trends and outcomes of gestational surrogacy in the United States. *Fertil Steril.* 2016;106:435-42.e2.
10. Gay surrogacy in other countries. Available at: <https://surrogate.com/intended-parents/surrogacy-for-lgbt-parents/gay-surrogacy-in-other-countries/>.
11. Utian WH, Sheean L, Goldfarb JM, Kiwi R. Successful pregnancy after in vitro fertilization and embryo transfer from an infertile woman to a surrogate. *N Engl J Med.* 1985;313:1351-2.
12. Ketchum SA. Selling babies and selling bodies. *Hypatia.* 1989;4:116-27.
13. Tong R. Feminist bioethics: toward developing a "feminist" answer to the surrogate motherhood question. *Kennedy Inst Ethics J.* 1996;6:37-52.
14. Steinbock B. Payment for egg donation and surrogacy. *Mt Sinai J Med.* 2004;71:255-65.
15. Roberts MA. Good intentions and a great divide: having babies by intending them. *Law Philos.* 1993;12:287-317.
16. Alvare HM. Catholic teaching and the law concerning the new reproductive technologies. *Fordham Urban Law J.* 2002;30:107-34.
17. Piersanti V, Consalvo F, Signore F, Del Rio A, Zaami S. Surrogacy and "Procreative Tourism". What does the future hold from the ethical and legal perspectives? *Medicina (Kaunas).* 2021;57:47.
18. Brunet L, Carruthers J, Davaki K, King D, Marzo C, McCandless J. A comparative study on the regime of surrogacy in EU member states. *European Parliament, May,15:2013.* Available at: [https://www.europarl.europa.eu/RegData/etudes/STUD/2013/474403/IP-OL-JURI_ET\(2013\)474403_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/STUD/2013/474403/IP-OL-JURI_ET(2013)474403_EN.pdf).
19. Brinsden PR, Appleton TC, Murray E, Hussein M, Akagbosu F, Marcus SF. Treatment by in vitro fertilization with surrogacy: experience of one British center. *BMJ.* 2000;320:924-8.
20. Nelson E. Global trade and assisted reproductive technologies: regulatory challenges in international surrogacy. *J Law Med Ethics.* 2013;41:240-53.
21. Family code of the Russian Federation as of December 29, 1995. No. 223. In: Butler WE, eds. *Federal Law, Moscow: 2005.*
22. On the fundamental of health care protection on the citizens of the Russian Federation. *Rossijskaja Gazeta.* 2011; No: 263 (5639) (in Russian).
23. Svitnev K. Gestational surrogacy in the Russian Federation. In: Scott Sills E, eds. *Handbook of gestational surrogacy. International clinical practice and policy issues.* United Kingdom: Cambridge University Press; 2016:232-240.
24. Svitnev K. Surrogate motherhood: problems of legal regulation and law enforcement. *Legal Issues in Health Protection.* 2011;9:52-91 (in Russian).
25. Svitnev K. Surrogate fatherhood for single intended parents: it is allowed? (Commentary to Federal Law No.323: Basis of Health Protection in the Russian Federation New Law and regulations No. 48). *All Russian Law Journal 2011* (in Russian).
26. Svitnev K. Legal regulation of assisted reproduction treatment in Russia. *Reprod BioMed Online.* 2010;20:892-4.
27. The Code of the Republic of Kazakhstan «On Marriage (Matrimony) and Family. *Almaty: 2012; Norma, p.104.* Available at: https://online.zakon.kz/Document/?doc_id=31583872.
28. Jussubalyieva TM. Surrogacy in the Republic of Kazakhstan: legal, medical, ethical problems. *Reproduktivnaya Meditzina (The journal Repromed-www.repromed.kz).* (In Russian). 2016;4:60-2.
29. The Guidelines of the Ministry of Health of Kazakhstan on Assisted Reproductive Technologies. The Code of the Republic of Kazakhstan on People's Health and the Health Care System, Art. 99 (Sept. 18, 2009). Available at: <http://www.wipo.int/edocs/lexdocs/laws/en/kz/kz081en.pdf>.
30. Kindregan CP Jr, McBrien M. *Assisted Reproductive Technology: A Lawyer's Guide to Emerging Law and Science, 2d ed.* (Chicago: American Bar Association) 2011;24-25.
31. Ethics Committee of the American Society for Reproductive Medicine. Consideration of the gestational carrier: a committee opinion. *Fertil Steril.* 2013;99:1838-41.
32. Surrogacy agreement (2011-2012). Assembly bill No. 1271, Chapter 446. Available at: http://leginfo.ca.gov/faces/billNavClient.xhtml?bill_id=201120120AB1217.
33. Torres G, Shapiro A, Mackey TK. A review of surrogate motherhood regulation in south American countries: pointing to a need for an international legal framework. *BMC Pregnancy Childbirth.* 2019;19:46.
34. Surrogacy in Israel. State of Israel, Ministry of Health. Available at: https://www.health.gov.il/legislationlibrary/poriut_05.pdf. (In Hebrew).
35. Embryo Carrying Agreement (surrogacy law). Israel Ministry of Health, 1996: pundekaut@moh.health.gov.il. Available at: https://www.health.gov.il/English/Services/Committees/Embryo_Carrying_Agreements/Pages/default.aspx.
36. Amendment number 2 to the Agreements Law for the Carriage of Fetuses, 5778. 2018. Available at: <https://www.health.gov.il/English/Topics/fertility/Surrogacy/Pages/default.aspx>.
37. Aramesh K. Iran's experience with surrogate motherhood: an Islamic view and ethical concerns. *J Med Ethics.* 2009;35:320-2.
38. Dar S, Lazer T, Swanson S, et al. Assisted reproduction involving gestational surrogacy: an analysis of the medical, psychosocial and legal issues: experience from a large surrogacy program. *Hum Reprod.* 2015;30:345-52.
39. Söderström-Anttila V, Wennerholm UB, Loft A, et al. Surrogacy: outcomes for surrogate mothers, children and the resulting families-a systematic review. *Hum Reprod Update.* 2016;22:260-76.
40. Serafini P. Outcome and follow-up of children born after IVF-surrogacy. *Hum Reprod Update.* 2001;7:23-7.
41. Jadva V, Murray C, Lycett E, MacCallum F, Golombok S. Surrogacy: the experiences of surrogate mothers. *Hum Reprod.* 2003;18:2196-204.
42. Imrie S, Jadva V. The long-term experiences of surrogates: relationships and contact with surrogacy families in genetic and gestational surrogacy arrangements. *Reprod Biomed Online.* 2014;29:424-35.
43. Jadva V, Imrie S, Golombok S. Surrogate mothers 10 years on: a longitudinal study of psychological well-being and relationships with the parents and child. *Hum Reprod.* 2015;30:373-9.
44. Pashmi M, Tabatabaie SMS, Ahmadi SA. Evaluating the experiences of surrogate and intended mothers in terms of surrogacy. *Iran J Reprod Med.* 2010;8:33-40.
45. Latham SR. The United Kingdom revisits its surrogacy law. *Hastings Cent Rep.* 2020;50:6-7.
46. Law Commission and Scottish Law Commission, "Building Families through Surrogacy: A New Law" (consultation paper 244 of the Law Commission and discussion paper 167 of the Scottish Law Commission), June 6, 2019. Available at: <https://s3-eu-west-2.amazonaws.com/lawcom-prod-storage-11jxou24uy7q/uploads/2019/06/Surrogacy-summary.pdf>.

Conflicts of interest: The authors declare that there is no conflict of interest.