

## Evolution of gestational surrogacy through the years and the new challenges for its implementation

## Evolución de la gestación subrogada a través de los años y los nuevos retos para su implementación

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### Abstract:

Surrogacy is an alternative for women who want to start a family but cannot for biological, surgical, or pathological reasons. However, over time, the implementation of this procedure has presented too many obstructions, due to ethical and legal issues. In many first-world countries, uterine transplantation has come to be considered the best alternative to achieve conception. It does not consider the treatment that surrogacy mothers usually receive, who in some cases are considered simple recipients. Many advances have been made in society, so it is necessary to maintain vigilance in how these types of alternatives are regulated to achieve the parenthood too desired by many couples. For this reason, the dignified and respectful treatment of women who offer their bodies to achieve parenthood, not to mention medical, psychological, and social support, is essential during this process.

### Keywords:

*Maternity, surrogate motherhood, surrogacy*

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### Resumen:

La concepción subrogada es una alternativa para la mujeres que desean formar una familia y no pueden por razones biológicas, quirúrgicas o patológicas. No obstante, a través del tiempo la implementación de este procedimiento ha presentado demasiados obstáculos, por cuestiones éticas y legales, ya que en muchos países de primer mundo se ha llegado a considerar al trasplante uterino como mejor alternativa para lograr la concepción. Esto sin tomar en cuenta el trato que suelen recibir las gestantes sustitutas que en alguno casos llegan a considerarse como simples recipientes. Se han presentado muchos avances como sociedad, por lo que es necesario mantener vigilancia en cómo se regula este tipo de alternativas para conseguir la paternidad tan anhelada por muchas parejas. Por esta razón, el trato digno y respetuoso a las mujeres que ofrecen su cuerpo para que se consiga dicho objetivo, sin mencionar el apoyo médico, psicológico y social resultan imprescindibles durante este proceso.

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## **Palabras Clave:**

*Maternidad, gestante sustituta, subrogación*

## **INTRODUCCIÓN**

Surrogate conception is a method of assisted reproduction that can help people who, due to anatomical, pathological, or surgical circumstances, cannot do so to start a family. Among the conditions that make conception impossible are for women with congenital uterine agenesis, major uterine malformation (bicornuate, tricornuate, septate, didelphic uterus), hysterectomy, poor uterine function with implantation failure or defective placentation, immunological diseases that endanger the health of the mother and the product, homosexual couples who wish to form a family and are unable to adopt (1).

This method of assisted reproduction is not of recent creation, since it has been practiced since ancient civilizations. If we look back at the past, we have records that it was a conventional method in Ancient Mesopotamia. Even data about surrogate conception appeared in the Old Testament with the story of Abraham, Sarah, and Hagar. Nevertheless, these records are not only evidence of the beginnings of the practice of surrogate conception but also the consequences and ethical problems derived from this process (1).

## **SEARCH STRATEGY**

A literature review was done with search engines to perform the analysis and approach to the implications of surrogacy (Pub Med, Elsevier, UpToDate) using as search terms the keywords: “maternity, surrogate motherhood”, and “surrogacy”. As exclusion criteria considered the articles reviewed did not exceed the publication date of the last five years, which is why was applied a search filter from 2019 to 2023. Besides that, they not only medically connoted the use of this assisted reproduction technique but also the social, ethical, and legal complications that it entails.

As a result of this search, approximately 50 articles were collected, and after analyzing the abstracts, 12 articles were considered based on the previously mentioned exclusion criteria. The reports were classified in favor or against this practice to have the least arbitrary research possible, considering those articles that met the parameters of the review.

## **MATERNITY**

Motherhood is the tendency of women to procreate, raise, and protect children (2). Throughout history, the concept of maternity appears as a set of beliefs and meanings in permanent evolution, influenced by cultural and social factors. In turn, these have been supported by ideas about women, procreation, and breeding, as aspects that meet and intertwine in the interpretation. Motherhood is considered a dynamic understanding since, according to the social space and its interpretation, the repercussions in the individual experience are very significant. This situation has been considered for a long time the most forcible investiture for the self-definition and self-evaluation of each woman, even those who are not mothers (3).

## **GESTATION OR SURROGACY**

Gestation or surrogate motherhood consists of the implantation of an embryo in a gestational surrogate mother by in vitro fertilization or artificial insemination. For this procedure, the intended parents must previously sign a contract, which stipulates whether the gestational mother will receive or will not an economic remuneration (4).

From the legal perspective, the term “surrogacy” refers to the right to substitute another in some legal situation, so that, starting from the context of gestation, surrogacy consists of the “substitution of gestation” (4).

## **SURROGATE MOTHER**

A surrogate gestational mother is a woman who carries the pregnancy to term and provides the means for the maturation, but not the genetic component. On the other hand, the surrogate mother provides both the genetic material and the gestational carrier for reproduction. The woman who agrees to use the services of the surrogate mother or the surrogate mother, as the case may be, is considered the contracting mother. (5)

As stated before, it is increasingly noticeable how the legislature has addressed the issue of compensation, in recent years. Not forgetting the evidence of adverse medical or psychological outcomes for women who assist as surrogates or among the children they give birth to. The literature has pointed out that surrogacy is a safe and increasingly popular custom. As long as it is a multidisciplinary team composed of doctors, psychologists, lawyers, and social workers assisting in the process and leading to a successful outcome (6).

All these conditions make any woman who wants to form a family a candidate for surrogate conception; however, when the first uterus transplant was performed, it revealed the possibility of being able to conceive a pregnancy since 2000. Notwithstanding, a hysterectomy had to be performed due to “unexpected” uterine necrosis, so the efforts had to be more ambitious. In 2011, a group in Turkey reported a cadaveric transplant donor, with successful completion. Unfortunately, that procedure has not resulted to the current date in a healthy live birth, which was the main objective of that procedure (7).

It was only in 2014 when the first delivery of a healthy baby in a living donor recipient was reported by a group led by Mats Brännström, which demonstrated both the feasibility of transplantation and helped to define relevant areas of research and clinical care. With them, the option was proposed in many countries around the world, where gestational surrogacy is not practiced due to legal, ethical, or religious concerns, as the idea of overshadowing uterine transplantation. (7)

The number of babies born through surrogacy is uncertain because several countries the practice is forbidden, and in those where it is allowed, the information on the procedure is confidential. Therefore, they are not registered by official

institutions. This last situation is the case in Mexico since the number of surrogate pregnancies is unknown. According to the Information Group on Elected Reproduction, A.C., it estimates that about 500 babies have been born as a result of surrogacy (8).

Despite the small number of reported cases, surrogacy has been a target of study in the legal, medical, and ethical fields. Due to the debate about the potential exploitation of women who offer this type of reproductive services and the “commodification” of babies born by this method. Even “social anxieties” have taken hold. Since, socially, pregnancy is an act naturally based on love, marriage, and sexual relations. It also considers that surrogate pregnancy undermines the idealization of motherhood as a selfless act on the part of a caring and altruistic mother (8).

## **BACKGROUND**

During the last 30 years, the practice of surrogate motherhood through the support of a third person in the family nucleus has increased. It has been possible to help many couples who wish to form a family, but this new technique has caused new challenges and unfavorable circumstances for its image and use (8).

Firstly, it should be clarified how it is performed today employing in vitro fertilization between sperm and egg of the biological parents of the product. On the contrary in vitro fertilization utilizing the paternal sperm in the ovum of the gestational surrogate generated a genetic link, but will this be enough to avoid the genetic link? Avoid attachment problems with the surrogate mother (1).

Considering historical data, we go back to the first case of legal surrogacy in the United States in 1976. In this case, the female surrogate was artificially inseminated and without economic retribution. This event reminds us of 1985 when the first in vitro pregnancy and embryo was performed on a pregnant woman. The hysterectomy was reported at 28 weeks of gestation, so the couple requested that an embryo be transferred to a friend of the couple, which resulted in a successful pregnancy, that type of agreement was rare; however, it was a way to offer the possibility of building a family to women whose uterus was absent or dysfunctional (1).

A year later, the famous “Baby M. case” would be fought, in which the contract was signed between Elizabeth and William Stern with Mary Beth Whitehead. Mrs. Whitehead was artificially inseminated with Stern's sperm. The agreement consisted of renouncing her paternity rights in exchange for 10,000.00 dollars. On March 27, 1986, she gave birth to a daughter who, despite obtaining a birth certificate with Mrs. Whitehead's last name, was delivered to the Sterns 3 days after birth; nevertheless, within those three days, Whitehead demanded that the baby be returned to her and threatened to take her own life. This situation generated a process that lasted more than two years, the resolution of which was, to award custody to Whitehead, while the Sterns ended up divorcing. The New Jersey court ruled that the surrogacy contract was invalid under public policy, which states that the biological parent shall always have an inalienable right to the products of his conception (1).

There is a record of surrogacy during the COVID-19 pandemic with interesting views by all parties involved, from the gay parents, the gestational surrogate, social workers, and family physicians (9).

The process was initiated in 2019 by parents Tru Hunter and Justyn Ceruti, a teacher and a U.S. Army soldier. For a homosexual couple, there were few possibilities to form a family, only adoption or surrogacy, so they were advised by a group of doctors, lawyers, representatives of fertility clinics, and other professionals, opening the opportunity to create their genetic material, the ideal candidate was a Canadian woman named Venus Haynes, a woman who had become a mother six years earlier and a member of the LGBT community willing to help gay couples to form their own family. Haynes agreed to the surrogacy; once the legal process was completed between the two different jurisdictions, the embryo was in vitro fertilized with Justyn's sperm and Tru's sister's egg to have genetic material from both parents. This process was not effortless due to the pandemic beginning in March 2020, the same month in which fertilization was scheduled for nine months of gestation they could only maintain contact through social networks (9).

From the perspective of the health personnel in charge of carrying out this type of procedure and from the experience of Dr. Rupa Patel, a physician who has attended surrogacy cases, she has referred that, in planned pregnancies but with attachment problems, she seeks to promote the attachment and connection of the mother with the fetus. However, in cases of surrogacy, she seeks to do the opposite, remaining detached and distant during visits to facilitate separation (9). This situation denotes a prime learning experience because even the health personnel should look for an adequate way to follow up the surrogacy cases, with a mature vision in which all the main participants of the situation are considered, in which both the parents and the medical team are involved.

Although this is only one side of the coin, advances in science and technology, coupled with globalization, are changing access to reproductive health services, introducing the transnational phenomenon of families using surrogate mothers to reproduce, with altruistic and commercial forms of surrogacy becoming more and more common. This situation brings to the discussion table the need for changes in laws, regulations, and policies for the protection of both surrogates and the resulting future parents and children, resulting in a delay in the guarantees of these in low- and middle-income countries, including South American countries (10).

IN 2019, Torres and collaborators conducted a non-systematic interdisciplinary review of the literature and legal analysis of existing and pending policies, laws, and regulations regarding commercial surrogacy arrangements in Argentinas, Bolivia, Brazil, Chile, Colombia, Ecuador, Paraguay, Peru, Uruguay and Venezuela. The result is that countries such as Brazil and Uruguay have issued guidelines that attempt to clarify the legality of gestational surrogacy for commercial purposes since it is clear that this new modality to obtain maternity leaves many doubts and difficulties in the courts, as regards the interpretation of the law and its applicability to surrogacy, where religious influence plays a role in the adoption of this assisted reproductive technique. (10)

It is relevant to mention that reproductive tourism in South America is a reality nowadays since the number of fertility centers and clinics that sell surrogacy services is increasing, offering surrogate mothers from South America to locals and foreigners, making clear the urgent need for the regulation of these practices. Consequently, the social, economic, and psychological security of surrogate mothers must be guaranteed, with emphasis on the cases of foreigners who resort to this reproductive resource when in their country of origin, it has a higher level of complexity and more structured legal foundations (10).

Complications have also been present in the state of health, which is why studies have been conducted comparing the risks of a pregnancy with assisted reproductive therapy with pregnancies conceived naturally, showing a primary relationship with infertility in the first instance rather than with reproductive assistance per se (1). Such is the case of a study carried out in the United Kingdom, which compared the incidence of hypertensive states of pregnancy, premature delivery, and defects of birth with different techniques such as, in vitro fertilization, both with frozen and fresh autologous cycles, and in which their analysis did not show significant changes in the risks, live birth rate or congenital anomalies after gestational surrogacy (5).

On the other hand, a retrospective cohort was carried out in the United States, for which it evaluated the reproductive trends and results of gestational surrogacy. The results showed that the people who most frequently resort to the use of surrogate mothers are those with a diagnosis of infertility for the future parents, those who have used several cycles of failed assisted reproductive therapy, male partners, advanced maternal age, adverse medical conditions for pregnancy, recurrent losses and a history of HELLP syndrome ("Hemolysis"). "Elevated Liver enzymes" (elevated liver enzymes). "Low Platelets (11, 12). para la que se evaluaron las tendencias y los resultados reproductivos de subrogación gestacional.

Among the most frequently used surrogacy techniques were freeze/thaw cycles, the use of donor oocytes with greater frequency, and the use of preimplantation genetic diagnosis, which in turn require an immeasurable amount of use of medical-biological resources, with their respective economic repercussions (8).

Gestational surrogacy has quadrupled in the United States since 1999, but in few places has it been legalized due to constant opposition from different social groups. Likewise, medical research has been updated, and compensated surrogacy has been introduced; however, its current legal prohibition is stereotyped under the initial argument of "maternal receptacle" (6).

In the United Kingdom, a country where gestational surrogacy is allowed when a survey of a specific group of women was conducted. The response was discouraging since they would prefer uterine transplantation to surrogacy or even adoption. The same result was obtained by surveying women of childbearing age in Sweden. Meanwhile, in Japan, a survey of more than 3,000 applicants revealed that transplantation has twice the acceptance rate compared to surrogacy (13).

Knowing that this technique is new and that there is still much more information to be gathered and analyzed from new studies and the development of laws that guarantee adequate compliance with the process. Expected complications may leave us as the only panorama, the expectation of advances in the years to come. We can infer that pregnancy is not only a physiological process but also a psychosocial one, so the fact of having to be a surrogate mother brings with it a series of responsibilities and emotional burdens that can generate that the process tends to be not very pleasant; this because, during the time of gestation, the woman must feel how a product that, to the naked eye, is "her own" develops in her womb.

Feeling the development of the fetus, together with the fact that involuntarily a mutual affective bond is generated, turns out to be the main reason why, at the moment of delivering the baby to the parents who requested its help at the beginning, both ethical and legal problems are created, in both senses. Without leaving aside that the human rights of the surrogate mother have been compromised multiple times, leaving her in a vulnerable image, without control or decision over her own body and her maternity (11).

Even more recently than the previously mentioned surgical technique, another option is to put into practice this range of alternatives in assisted gestational therapy, which, although it may be more expensive, is safer in terms of effectiveness results; this is the case of the introduction of the artificial placenta, a technique that offers a way of interrupting the pregnancy without terminating the gestation (8). This technology can help women with poor placental function problems to achieve a high-risk but desired pregnancy. This aspect raises the question of the extent to which pregnant women are entitled to opt out of gestation. Nonetheless, these may be ethical questions that can only be answered as we await further publications of this recent but promising treatment in the case of uterine transplantation (12).

Ethical and sociopolitical debates about access to surrogacy are ongoing, and similar questions are raised about access to uterine transplantation and artificial placentas. This context lets us illustrate the extent to which the law can dictate who can access reproductive technologies as seen in Table 1.

Table 1: Systematic Review Results

| Author                       | Country                        | Objective   | Sample  | Results   | Conclusions   |
|------------------------------|--------------------------------|---|---|---|---|
| Philps et al (2019)          | United States of America (USA) | To examine the prevalence and requirements of surrogate pregnancy and maternal and prenatal outcomes.   | 153 articles  | Fetal risks associated with surrogacy such as low birth weight, increased risk of multiple gestation, and preterm delivery. Maternal complications, for example, antihypertensive disorders, postpartum hemorrhage, and gestational diabetes. | Surrogacy is a parenting path that is not without risk to the surrogate mother or the fetus.  |
| Klock et al (2020)           | United States of America (USA) | To provide a summary of current issues in the optimization of care in cases of surrogate pregnancy concerning medical, psychological, and legal sentinel cases, which serve to guide providers in the current management of these services. | Four articles are concerned about medical, ethical, and legal considerations.   | Synthesis of the current clinical research related to surrogacy.  | Although surrogacy cases present a small percentage of all reproductive assistance therapy cases, they require a great deal of medical, psychological, legal, and nursing resources.  |
| Yau et al (2021)             | United States of America (USA) | To highlight the literature on the medical and mental health of surrogate mothers and children born through surrogacy.  | Review of 51 articles   | The psychosocial evaluation involves understanding the preferences of each party during the engagement, among the absence of psychopathology and financial coercion via counseling on possible adverse outcomes.                              | Increase in adverse outcomes associated with the use of assisted reproductive therapy for the treatment of infertility compared to that expected for general population rates believed to be caused by a manifestation of prior uterine disease.  |
| Haynes et al (2022)          | Canada                         | To publicize the process of gestational surrogacy of a homosexual couple internationally during the period of pandemic by Covid-19.   | Case study  | A more personalized approach to management subrogation during health constraints such as the COVID-19 pandemic.   | Gestational surrogacy is a therapeutic option for assisted reproduction, useful when the process is carried out properly and by experts in the field from different areas.  |
| Elizabeth Cioe Romanis(2022) | United Kingdom (UK)            | It shows the differences between technologies that aid conception and those that aid gestation to demonstrate what diverse problems arise when these new technologies are used.   | 19 articles on gestational surrogacy, assisted reproduction therapy, and its legal repercussions on the surrogate mother and the children | Cases of contracting the services of surrogate mothers are reported, undervaluing the value of women as simple recipients of pregnancy  | While considering the reform of the surrogacy law, it is pertinent to broaden the conversation on assisted gestation, including a reflection on the conceptual issues that assisted reproductive therapies, mainly the terms of bodywork and practical legal aspects.                               |
| Torres et al(2019)           | United States of America (USA) | Evaluate different policy responses to commercial surrogacy in South American countries, analyzing their current legislation and describing how the regulation of commercial surrogacy is implemented.                                      | 66 articles consider different political responses to commercial surrogacy in South America   | Despite low infertility rates compared to the rest of the world, the use of assisted reproductive technologies in the region appears to be increasing.  | As increasing number of fertility centers and clinics selling surrogacy services offer South American surrogate mothers to locals and foreigners, revealing the urgent need for regularity of surrogacy and pointing to an opportunity for a legal or regulatory framework for regional governance. |

**CONCLUSION**

Some may not consider surrogate mothers to be “mothers” due to all the psychological and legal implications that occur during the process, but it is necessary to add that they should be interpreted as mothers of the children they give birth to, even if they fully intend to give those children to the care of others, always under the premise that it is their inalienable right. These women maintain a specific relationship with the children they have conceived, not to mention that they live in different moral

circumstances specific to their pregnancy and are subject to the practices that define motherhood in the postpartum period.

Hence, the argument lies in the fact that many surrogate mothers are seen as mere” recipients” deprived of the right to respect as persons, mothers, and even of their human nature. For this reason, it is pertinent to work on the design of legislation to generate a protocol of action for this type of support tool for the development of motherhood.

Nowadays, it is and will continue to be a delicate issue since every time this procedure is performed, a multidisciplinary team must be involved, and a common agreement must be sought for the sake of the health of the parties involved, the parents who require this “conception aid” the woman who provides it and the children who are the fruit of this collective consent.

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