

Ethics of assisted reproduction

Why the topic of ethical aspects of assisted reproduction? For one thing, it's a topic that is from my point of view very interesting, from a certain point of view controversial, but above all current.

The focus of the discussion is on the moral dimensions of processes involved in the origin of life, particularly the morality of assisted reproduction, the morality of prenatal testing, and the morality of prenatal care and treatment.

Infertility is recognized as a sickness by the WHO (World Health Organization). Therefore, sterile couples have the right to receive care from all available reproductive medical resources.

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The focus of the discussion is on the moral dimensions of processes involved in the origin of life, particularly the morality of assisted reproduction, the morality of prenatal testing, and the morality of prenatal care and treatment. The international Convention on Human Rights in Medicine, which was adopted in 1997 in Oviedo and is implemented by other transnational agreements and local laws (including the most recent amendment to Act No. 373/2011 Coll., on Specific Health Services), established the fundamental principles and conditions of assisted reproduction, but progress in this field is moving at such a pace that out-of-date conditions, principles, and laws can result in the misuse of new technologies.

Before discussing ethically uncertain aspects of assisted reproduction, let me describe some definition.

Infertility is defined as the inability to become pregnant within 1 year of regular unprotected sexual intercourse (min 3 times per week).

"Assisted reproduction methods are procedures in which, as part of the treatment of infertility manipulates human sex cells (sperm and eggs) and embryos." (Weiss, 2010, p. 310)

In vitro fertilization (IVF) it is literally out of body fertilization ("test tube babies").

Intracytoplasmic sperm injection (ICSI) is a method that again takes place in laboratory conditions under a microscope. First, sperm are collected from the testicle or masturbation, then using a microneedle they lead directly to the egg.

Cryopreservation of sperm, oocytes and embryos is a method of cooling and storing germ cells, eggs, sperm at very low or freezing temperature to save them for future use.

Donation of genetic material- is when person (donor) give to another person (recipient) eggs, embryos and sperm.

Surrogacy is an arrangement, often supported by a legal agreement, whereby a woman agrees to delivery/labour for another person or people, who will become the child's parent(s) after birth.

As for the ethical aspect in assisted reproduction field, I would divide the topic into several subtopic:

The embryo's moral position

The ambiguity of the embryo's moral standing would be resolved if the two ethical positions on the topic of assisted reproduction could not be reconciled.

Some churches and religious individuals, in particular, hold the first opinion, which states that the conception, or the joining of the egg and the sperm, marks the beginning of human existence.

The second viewpoint grants the embryo the status of a potential human being and is a compromise supported by scientists, ethicists, and medical experts. The second perspective, which has the status of a prospective human being, is a compromise backed by ethicists, scientists, and medical professionals. Most ethics committees have come to the conclusion that for the first 14 days the embryo does not have the moral status of a human being since it is not until around the fifteenth day that the first primitive nerve cells start to grow and the "humanity" of the embryo begins to increase. Most couples undergoing assisted reproduction share this opinion, as do most professionals.

And the current opinion from practice? Embryologist Dr. Chládek (Pronatal nord clinic) gives an answer to this: "The latest opinion is set by the Tissue Directive of the European Union. The embryo has, in the phase before embryo transfer, the status of a therapeutic cell product."

The theoretical arguments of the second group are clearly preferred in practice. A deal will probably not be reached anytime soon. I support the second point of view as a doctor and as the person.

Micromanipulation techniques and gender selection

Preimplantation diagnosis using micromanipulation techniques offers unimaginable prospects for couples where one or both parents have a hereditary susceptibility to a birth problem. For instance: ICSI (intracytoplasmic sperm injection). Given that one sperm is chosen by the embryologist and not based on physiology, we can claim that this is a definite instance of nature being bypassed. However, due to the longer cultivation (until the fifth or sixth day), any improperly or slowly developing embryo can be identified, increasing the likelihood that the fetus will develop normally.

AH (assisted hatching). In order to aid the embryo's emergence from the egg shell, the zona pellucida, which covers the embryo, is disrupted. Experience has shown us that an embryo lacks the ability to survive if it has the strength to break free of its shell.

Antibodies against the zona pellucida are the cause of this disease. The topic of immunology encompasses a lot of illnesses that are comparable. Couples must deal with the reality that not all medical offices and clinics order immunological tests. As a result, there may be an endless amount of wasted efforts, time, energy, and resources. This issue also remains ethically open in my opinion.

One of the tenets of the Convention on Human Rights and Biomedicine, which states that human assisted reproductive techniques should not be used to select the sex of the child or to obtain special traits in a future child, already appears to be in doubt. It is only a matter of time before this situation continues. We are only permitted to choose the gender of the future child in cases where we are able to avoid a significant hereditary sex-related condition. In certain nations, like Thailand, it is already legal, while this issue is currently being debated in others. Tourism centered on "fertilization" is starting to rise. I believe that selecting a child's gender as the primary objective of a pregnancy is seriously unethical.

Cryopreservation and Stem Cell Research

Unused embryos are frozen and stored in liquid nitrogen. In this form, they can be stored for many years. Advantage: If the first or second IVF attempts fail, the couple can try again without the stimulation and egg retrieval process. But what kind of stress does the freezing cause in the beginning? Does it develop naturally? Do we have the right to handle or control a potential human being in this way? Are we sure that freezing will not affect the child's health in the future?

Cryopreservation of sperm has been used for many years, now freezing of egg cells (oocytes) is also done. Freezing ovarian tissue (tubes) and ovarian tissue (without stimulation) is also a common practice. The benefits are obvious. These are mainly situations in which expected health complications and demanding treatments (chemotherapy) can have a bad, if not catastrophic, effect on the reproductive organs. The possibility of freezing "healthy and fresh" sex cells at a younger age and their later use (often after a demanding life) is already real and also brings the "advantageous" possibility of extending the reproductive age. Is it ethically permissible? At least, this further complicates the ethical situation.

While it is clear that embryos kept forever in liquid nitrogen would probably not fulfill their potential to transform into a human being, is it immoral to turn these "surplus" embryos into embryonic stem cells that can be used for research and, in the future, for the treatment of serious diseases?

The opinion of the opposing minority should be respected and acted according to the moral standards recognized by the law. And even if the donor is an unborn sibling. The embryo is created by assisted reproduction and genetic testing is carried out before implantation. If there was a suitable donor among them who did not have a genetic disease, the older brother would win. Is it a beautiful dream or a nightmare?

Giving birth to a child for a certain purpose is certainly immoral. Stem cell research seeks to simplify this route, and if it were, the necessary bone marrow would be grown in a dish from embryonic stem cells at the pre-implantation stage. Concerns about abuse and purposive selection are not entirely unfounded. This is where the legal standards for ethical aspects change.

Egg, sperm and embryo donation

Sperm, ovum and embryo donation is also a commonly discussed ethical issue in the assisted reproductive process. It implies the inclusion of a third person in the reproduction process.

The possibility of kidney donation, blood donation, marrow donation is almost certain, the ethics of these options have been resolved and accepted by the majority. Now a "healing cell preparation" is added to them. Donation issues are often attributed to the conscience of the participants by the public. Many expected him to be an authority figure who could say the right thing under all circumstances. But conscience is also related to the community.

A process taking place on the child's own side. Will he be able to face his own identity in the future? Does he have a right to know his biological parents? Will it be allowed? Will he be able to deal with his situation without problems? Does he respect and love "his" parents even knowing the circumstances of his birth? In Sweden, "test tube babies" have the right to know who their biological parents are after the age of eighteen.

The following process takes place on the receiver side. Will this fact be a problem for them in the future? Will they deal with any genetic load? Will both parents always love their children, regardless of their origin?

After the divorce, the woman devalues her ex-husband, the father with whom she raised a child through sperm donation, saying: "He has no real rights over the son, because he is not his biological father. "The organization of the family will not be broken? It depends on the correct application of the whole question. And the giver? Guaranteed anonymity - in the Czech Republic (in the United States, the entire donor database with photo and life history is available to those interested in sex cell donation) . Will the donor regret his actions one day? Wouldn't he be obsessed with the idea of knowing his child, or his other half? How and who increased it?

Surrogacy

How does a woman feel pregnancy when she knows she will abort the child? This woman may not act responsibly enough while pregnant because she is aware from the start that the child she gives birth to is not hers (e.g. when it comes to smoking and drinking alcohol). What impact might her "experience" with pregnancy have on the unborn child? What drives the women who act as surrogate mothers? Money isn't everything all the time. Women who have never experienced sex, a romantic relationship, or love are one possibility, but their motivations could also be completely unselfish. Should the child have the right to find out who his surrogate mother was?

Our legal system dictates that the mother of a kid is the one who really gives birth to it. And it is a big problem I think. A lawyer, friend of mine told the story of how he organized surrogacy for a couple, and he suggested that the surrogate mother go with the passport of this childless woman. This is a clear breach of the law. But at that time there was no other solution. The law aspects of surrogacy should change.

The IVF process also brings some risks for the couples, especially for woman

Ovarian Hyperstimulation Syndrome (OHSS)

It is an extremely significant health problem caused by hormone stimulation. Every woman can be in danger. In fact, she can pass away from hyperstimulation syndrome. One woman describes this condition as a nightmare: "Nobody informed me that hyperstimulation syndrome existed, so I didn't feel ill until about a week after the egg collection, when I was at home and had trouble breathing. It impacted my lungs. So they first addressed my pulmonary condition, linked it, and then they sent me to the gynecology department for a Intensive Care Unit and placed me on oxygen...three weeks... It hurt terribly. It was awful... I was miserable and, in fact, I was still choking. I had a lot of swelling. I was swollen by 10 kg for the first time. I noticed that my skin was thin... they sucked water from my uterus without giving me any anaesthetic, and the doctor at the time said, "He didn't want I would like to be a her." I took it quite negatively, and I wanted to get out! I didn't want to have any children."

Psychosocial aspects

The procedure of artificial insemination extends the limits of stress, depression, as well as desire and hope. An "emotional roller coaster" is an accurate description of the emotions and sensations that patients go through. The entire artificial insemination procedure should be accompanied with psychological therapy for all infertile couples. Treatment for infertility frequently results in physical discomfort, mental strain, and effects on relationships, sex life, and social and professional relationships. Despite the fact that medical advancements are welcomed because they enable patients to receive more effective treatment, there is still cause for concern because, in contrast to technical developments in diagnosis and therapy, the field of psychology and the comprehensive approach to the human personality are frequently not given enough attention, and this topic frequently even has to make sacrifices.

Couples that choose assisted reproduction face a very challenging time, and the results may be long-lasting "Stress that develops during sterility treatment manifests on three fundamental levels: the physiological, psychological, and interpersonal. According to various statistics, 25–60% of infertile couples experience psychological issues while undergoing therapy. According to the various questionnaire, more than half of infertile women exhibit traits that are thought to be indicative of psychological disorder.

Ethics of legal aspects

Whose property are the embryos after a divorce? Who is in charge of them, and is there a higher possibility for the one who wants to conceive them with a different partner? Who should make the decision and how if the surrogate mother does not want to give up the child? There are numerous conjectures and queries.

Does a woman who is single have the right to become pregnant? Two adults two men or two women who are not parents or who are co-parenting a child from a prior union? A man by himself with cryopreserved embryos after losing his beloved wife? A mother who lost both her child and herself in an accident and was also prevented from becoming pregnant again due to an injury? Such dilemmas arise frequently in life, and relying solely on the law to support a refusal is difficult. Is it moral to ignore their condition and refuse to assist them when medicine has a cure? I think that these issues require changes in the law.

Conclusion

The practice of assisted reproduction has changed the way that the majority of infertility conditions are treated. At the same time, it created a variety of fresh opportunities for carrying out the reproductive process, which we discuss in this review together with their moral implications. The regular application of assisted reproduction to a married couple raises a lot of brand-new ethical issues as well (sex selection, donated sperm, manipulation of fertilized eggs, etc.). The desire to legalize the situation before the "reproduction business" seizes control of the applicable reproduction process is another factor contributing to the growing number of these issues. It is evident that it is very challenging to design reasonable laws in a subject that is continually evolving.

Our main goal as a professionals is to develop an efficient system of psychological support for assisted reproduction participants while taking into account the unique aspects of these novel medical techniques, to prevent Ovarian Hyperstimulation Syndrome, but the most ethical questions remain open.

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