

# ETHICAL PROBLEMS OF NEW REPRODUCTIVE TECHNOLOGIES

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**Abstract:** The essence of this scientific article is that reproductive technologies in medicine and their stages of development, Intrauterine sperm injection, medical centers treat male and female infertility with the help of reproductive technologies, World experts regularly review the ethics of embryo use. tarishi and many other information are given.

**Key words:** Germ cells, cryopreservation of embryos, Intrauterine sperm injection, reproductive health clinic, reproductive technologies, Assisted reproductive technologies for the development of in vitro fertilization.

## INTRODUCTION

In 2010, the Nobel Prize in Medicine was awarded "for the development of in vitro fertilization". This event highlighted how important this technology is to humanity. However, before and after the first successful IVF, thousands of scientists and doctors made many revolutionary discoveries in the field of assisted reproductive technologies, which greatly expanded the ability of doctors to deal with infertility.

The chronicle of the recent history of the development of reproductive technology is written before our eyes: 10 years ago, only a few were known about areas such as germ cell and embryo cryopreservation, oocyte cytoplasm assisted insemination (ICSI) and sperm injection. was a strong ecological center. Every year, new services appear in this field - for example, now scientists are working on putting into practice the method of maturation of follicles outside the body of a woman. IVM helps pregnant women with cancer to avoid hormonal overload in the patient's body and to get pregnant.

It is not known that Russia is among the ten leading countries in the development of reproductive technologies, like Japan, USA, Israel, Australia, France, Germany, Italy, Spain and Great Britain. The first test-tube baby in the USSR was born in 1986, just 9 years after Louise Brown. And today, more than two hundred reproductive health clinics have been opened in Russia, which help patients who cannot conceive a child naturally for various reasons on a commercial and budgetary basis.

Laws regulating the use of assisted reproductive technologies in Russia (including Federal Law No. 323-FZ of the Russian Federation "On Fundamentals of Citizens' Health Care" (Chapter 6, Article 55) and Russian Health Order No. 107 of the Ministry of Health of August 30, 2013) as in other countries, there are many restrictions. For example, in Italy, the use of IVF outside of marriage is prohibited, as well as the use of donor sperm, frozen embryos and the services of surrogate mothers. In some countries, however, couples must show doctors that they have lived together for at least two years.

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Intrauterine sperm injection can be used when a woman does not have problems with ovulation, but the sperm cells for any reason cannot reach the egg cells and fertilize them.

Assisted reproductive technologies help women to overcome many causes of infertility. Fetal sperm donation can be done with the help of a donor substance. The initial consultation is focused on the issues of in vitro fertilization of oocytes.

Medical centers treat male and female infertility using assistive technology.

About 40 years ago, an event happened that changed the way humanity views the problem of infertility. A remarkable feature of the baby was that its conception took place in a laboratory, not in the mother's body. From that day, the whole world learned about in vitro fertilization (IVF).

In particular, IVF is not the first reproductive technology in the history of medicine: at the end of the 18th century, there is evidence that doctors were looking for pregnancy by injecting sperm directly into the patient's vagina. Today, this method - artificial insemination - is also successfully used in infertility treatment clinics.

Advances in medicine have given many partners and single women the happiness of parenthood. However, debate continues about the acceptability of human intervention in the "pregnancy bond". Traditional beliefs prohibit or limit the use of assisted reproductive technologies, considering them an attempt to compete with God in man's ability to create the miracle of new life. The Catholic Church has a strict position on this issue (they reject almost all sexual technologies), while other world religions are more lenient, in most cases they support IVF of priests, if the patients are married and the donor material is not used without fertilization.

## MAIN PART

Along with issues of a religious nature, world experts regularly raise the ethics of embryo use. With IVF, doctors fertilize several eggs at the same time, then transfer 1-2 zygotes to the patient's body. But what about the rest of the embryos? Scientists recognize that the use of stem cells or the acquisition of scientific experiments can contribute to the development of medicine in general and help to improve the quality of subsequent IVF in particular. But, from an ethical point of view, such behavior is considered questionable - it is difficult to define the border between "immaculate" genetic material and an unborn child.

Despite these challenges, where health problems in adults are almost universal, new reproductive technologies are a necessary intervention that offers hope to millions of infertile couples for strong families and the birth of healthy heirs.

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In Vitro Fertilization (IVF) - This is the most common way to help a couple with infertility to get pregnant. Sperm are of poor quality or have physical barriers to prevent germ cell aggregation under natural conditions. The classic IVF scheme includes stimulation of the patient's ovaries with subsequent puncture, fertilization of eggs and sperm, preparation for in vitro fertilization, and transfer of the embryo to the woman's uterine cavity.

Embryo transfer Refers to one of the stages of IVF procedures, which is defined as an independent method when cryoservicing is carried out. As previous attempts at artificial insemination have failed, this manipulation may be necessary, as well as to increase the probability of pregnancy (the female ovaries skip the menstrual period, which is stimulated to stabilize the hormones in the body). The average price of an embryo is 20 thousand rubles.

## CONCLUSION

Artificial insemination is prescribed if the patient does not have problems with ovulation, but the sperm does not fall into the egg and fertilize it for some reason, or in cases where one woman decides to become a mother with the help of donor sperm. During the operation, spermatozoa prepared with the help of a catheter are placed in the uterine cavity and increase successful conception. The efficiency of the procedure is about 15%, the average cost in Moscow clinics is 12 thousand rubles.

Preimplantation diagnosis of genetic diseases is a relatively new service that allows the embryo to be transferred into the uterine cavity to exclude the presence of genetic pathology. This procedure is very important for families with severe hereditary diseases, as well as for families over 40 years old. Genetic analysis is performed shortly after in vitro fertilization. The cost of the procedure is equal to the cost of IVF and is determined by the amount of analyzes performed and the costs used.

Despite the apparent complexity of the specified technique, Russian specialists have gained considerable experience in the application of reproductive technologies in clinical practice. Doctors admit that there are almost no problems related to the treatment of infertility, and even in the most difficult situation, patients have the option of choosing a service that will help them realize their dream of having a child early or late in life. The most important thing is to pay attention to the choice in the clinic and lose faith in success.

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