ETHICAL DILEMMAS OF INTRA VITRO

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Moto: And God blessed them, and God said unto them, Be fruitful, and multiply, and replenish the earth, and subdue it: and have dominion over the fish of the sea, and over the fowl of the air, and over every living thing that move upon the earth. (Genesis, Chapter I of 28)

The growth of the humanity, the particularly various aspects of fertility and sterility, the public blame toward the infertile couple and moreover toward infertile woman who were the victims of all centuries, the religious dogmas that have governed or influenced some major aspects of reproduction in society, aroused extensive discussions, at least in modern times, on issues, as the right of everybody to have children, in what circumstances, when, until when, or how many.

Such an approach can be considered appropriate to the subject, even in Romania, where we have a project for the Human Assisted Reproductive and Embryology Law framed by The Association of Embryologists, that takes into account:

• Directive 2006/86/EC of the European Commission, issued on October, 24th, 2006 regarding the implementation of Directive 2004/23/EC of the European Parliament and the European Council concerning traceability requirements, notification of serious adverse reactions and events and certain technical requirements for coding, processing, storage and distribution of human tissues and cells, as well as a national program to support couples who need in vitro fertilization, which will start this year. (Source: Ministry of Health).

The elaboration of this bill was needed in order to put in legal framework the assisted human reproduction process, after many years when it run relatively chaotic, being regulated by existing international regulations or by the common sense of clinicians.

These ethical issues should be approached in social, medical and even religious terms. A major limitation of the debate stems from the fact that it is not recognized, sometimes even by the specialists, that is necessary to look to the new technology of human reproduction as an independent variable, a social product, closely related to other social factors and these are extend beyond medical science.

The history of the successful assisted human fertilization begins with the first baby conceived in the tube, born on July, 25th, 1978, at Old Ham Manchester General Hospital, the famous Louise Brown, and starting form then hundred of thousands of children were created in this way. In the United Kingdom one of 80 children born in 1997 was the result of in vitro fertilization treatment. In Denmark, this rate is much higher, 1 to 38, meaning 2.6% [1].

In Romania, the first in vitro fertilization center began to operate in Timisoara in 1995 at the Obstetrics and Gynecology Clinic of the University „Bega”, under the leadership of Professor Ioan Munteanu. The National Transplant Agency data show an increase in the number of in vitro fertilization procedures performed, 6,363 embryo transfers being made in 2007 and 2008, being born more than 6,000 children. (Source: Mediapax)

IVF is a technique of assisted human reproduction which is made when all conventional treatments have failed (including the other human assisted reproduction procedure, less invasive – the artificial insemination) or in more serious cases of infertility, in which is recommended as an election method.

Thus, the new human reproductive technology has been designed on the assumption that, the new family
member should be a controlled choice for parents rather than a product of sexual activity or a result due to divine decision. Meanwhile, the technology has developed because the medicine wasn’t limited to address only to disease and disability but must play an active role in helping people.

The introduction of new technologies such as IVF may have unanticipated social consequences. IVF, although being a response to the changing family life pattern of the 1960s and 1970s, its application was a first practical technique which help people who were unable to have a conventional family. Thus, the opportunities of “renting a womb”, the “virgin” mothers, gay "families" or the selective use of „high quality sperm” were not recognized and, certainly have been overlooked in the day when Louise Brown was born in Oldham from two common parents. However, these possibilities have been involved from the beginning in the more permissive social context of the western society [2].

The implementation of IVF techniques raises a number of issues, dilemmas and debates starting with the biological sciences, to those relating to ethics, sociology and law.

- **The provenience** of the gametes raises one of the biggest ethical dilemmas. In case the oocytes and the sperm are furnished from the same parents, ethically, the problems arise from the lack of intercourse between spouses up to life of the embryos. By the procedure the semen is collected for IVF, the emotional dimension of the marital act is not reached; counting only the physical aspect of procreation, and another problem appears by the intervention of the third party involved in this act, the clinician, and / or the surrogate mother.

The ethics professionals are debating the medicalization and the dehumanization of the process of reproductive health, which is directly attacking the divine dignity of human reproduction because of the disappearance of the emotional-physical union between partners. There are voices who say that in this way traditional family values are undermined and the balance between the patriarchal authority and the new technocratic authority is reversed.

- **The fate and the number of the embryos.** In most cases of IVF it is dealt with more embryos because, taking into account the low success rate, the required number can’t be known from the beginning. Usually, more embryos are transferred into the mother’s womb, hoping that at least one of them will be successfully implanted. The need of multiple embryo transfer leads to multiple pregnancies. The multiple pregnancies achieved through this method involve the subsequent reduction of embryos. This means that many embryos are eliminated to improve the survival chances of one or two embryos, in fact an abortion is made, and, from the religion point of view, a homicide.

- **The statute of the embryos and of the parents**

  The problems multiply when is need to refer to a surrogate mother when the biological mother can be fertilized, but can’t, for reasons of health, to end her pregnancy. In such situations, the gametes from a couple who wants a child are transferred into the womb of another woman, resulting an embryo that will develop into a ,,surrogate” mother.

In all these cases, first, the status of the couple, whose members can not conceive children or sustain a pregnancy, is endangered by the interference of a third party: the attending physician or the surrogate mother, because the fecundation takes place outside the mother’s womb. Then, difficulties may appear related to the newborn’s identity. His biological status does not match to the social or legal one. An increasingly number of cases are reported, when a pregnancy with a child commissioned to a sterile couple took place in the uterus of a sister or another relative or, very rare, even of the ovule’s donor mother. It is not yet well established, within the limits of legality, the way in which, legally, the child reaches his biological family.

After giving birth the surrogate mother has to "abandon" the child, allowing him to be adopted by his biological parents, after they got him into care. The abandonment, however, is liable to submit to legal consequences and the potential adoptive parents, the biological ones, in fact, should be married in order to adopt the child [3].

- **Incidents**

  In case of the use of preserved semen in liquid nitrogen, in the bank sperm, confusions may arise about the donors of sperm.

  In most cases when the conception was done with sperm from the sperm bank, the child hasn’t the opportunity to know his father.

  In case of a poor control of the these sperm banks (banks which should keep the donor’s identity safe ) more children can be born from the same father. There is a risk that, even a little one, through their marriage, to appear genetic disease to their possible followers

  Starting from the moment of semen selection – a criteria that is increasingly took into account by those who use IVF technique – it appears the risk of eugenism.

- **Posthumous children.**

  Here have to be discussed the cases when frozen embryos were used. The embryos were implanted after their biological father died, and being born so –called “children after death” “children from beyond” “posthumous children” coming from sperm taken from a man who suffered from an incurable disease or brain death, usually at the wives request, fiancées or their parents.

  The ethical issue is whether a dead person is entitled to have posthumous children, or whether the living relatives who require this exhibit selfishness toward the future child who will live without his father.

  The clinician is the pivot in the IVF ethics process, it is he who must determine the real reason for the patient or the couple to choose IVF and if this technique is...
suitable for her (them). Properly evaluating all psychological problems, those related to resources, effort, which involves in vitro fertilization, the physician should inquire to what extent these procedures and their consequences will affect the patient's life or will direct properly the following procedures, all under the golden rule of informed consent [4].

IVF involves high costs for the families who choose this method, also involves physical and psychological risks for donors and particularly for women involved in this process. IVF processes are invasive of the privacy of women and provide breaches in the continuity of her reproductive life, and also, involves greater risks than usual, especially for the embryos.

- Another ethical dilemma is related to the sexual orientation of parents, mostly of mothers. During last years, IVF is a method preferred by gays and lesbians to have children. In the Western society, a large proportion of those who appeal to this method are not heterosexuals. Although contrary to the religious rules, it is considered ethically, that a person has the right to have offspring, even if his sexual orientation would not allow it naturally.

The same should be ethical for people without financial possibilities, but who can not have children otherwise. Unfortunately, IVF is a process still very expensive. There are countries where some of these techniques are financially supported by the state for cases falling within the requirements of law. But in most cases, the procedures are financially supported by mothers and couples.

- The age of mother. A long series of debates, that has not been completed, started more than 13 years ago, when it was found that infertility treatments can be applied to postmenopausal women, allowing them to have children when, biologically, this would not have been possible. The questions which arise are whether menopause should not be a barrier to the application of these treatments, or who would be the maximum age at which IVF should be accepted.

Some experts believe that a pregnancy at old age raises major moral problems as long as the mother has no chance to live (mostly) to provide emotional and physical stability needed for the child. There were scientists who disputed the idea, saying that there should be no age barriers in these situations [5].

Unfortunately, once considered the oldest mother in the world who conceived through IVF, Maria del Carmen Bousadarea, is dead, this issue brings to date again. The woman gave birth to twins at 66 years, following in vitro fertilization and appealing to a ova donor. She died three years later, aged 69, leaving the twins in the care of relatives.

- Experiments on embryos
Along with the diversification of IVF methods, have multiplied also the types of experiments on embryos. They aim to expand the knowledge on human DNA, on many aspects of immunological compatibility. In many countries, the absent or permissive legislation allows the use of embryos and even of fetuses obtained by causing the miscarriage on experimental purposes, being claimed the therapeutic character of the research to solve some incurable diseases, particularly those of genetic nature. Hence, it appears also the most sensitive and ethical stormy problems.

Do not forget, however, that, the techniques are continuously improving and that means the destruction of a large numbers of embryos, modifying and marketing and even exploitation of people and processes.

To discuss about the research and manipulation of human embryos, we must know what they are. We consider the simplest form of biologically and therefore moral, human single-cell zygote, the product of conception or the embryo, that can be described as "human genetic material. We can identify the essence of the embryo as "human product or product of conception" drawing attention to the potential for development under appropriate conditions, in an individual human being.

A human embryo, even in its basic form, is a life form of the Homo sapiens species. We might respond that the zygote has a long way to go before becoming a fully developed person and that its moral status, therefore, must be in some respects, lower than that of an adult.

Although the moral relations with the embryos are limited by their structural simplicity, their moral status is determined by their ability to become fully developed human beings in order to enter at the right time in the human community [6].

There are theories that say: human embryos should be treated morally, according to the same principles as other human individuals, because they contain the same essential human capacity.

In recognition of the equal statute of all human family members, it is desirable to adopt the principle of equal respect for all human persons. This, essentially, means that our respect for human individuals must be absolute.

But it is important to emphasize that, in time; such research will allow understanding, detecting and controlling, most likely, many forms of congenital diseases. This will also lead to the decrease of abortions and, almost certainly, to the development of new contraceptive techniques. Finally, we must not forget that the research on human embryos is in the early stages and that, as trend shows, can lead to benefits less intuited now, that might result from this field.

In 1984, in Warnock Report, were expressed many important points of view about the status of the embryo. The document established a clear distinction between fertilization and the moment of emergence of human life. Warnock Report claims that "immediate product of conception" is not a human being, the beginning of human life being rather an ethical problem than a biological, but no account was taken of
the fact that human development should be seen as a continuous process, since zygote forming until the birth itself. Each stage is as important as that of an adult, recognized as a model associated with the status of a human person.

Warnock report concluded that, before the 14th day after conception, the embryo can not be considered an individual organism. Around this time, appears the primitive form of embryonic neural tube, moment considered as the onset of nervous system development. The beginning of the individual human life, therefore, coincides with the loss of embryo ability to divide in order to form the separate body. This thesis ignores the fact that the human embryo, both before and after the 14th day, is part of an ongoing process, specific for a human person [7].

The World Medical Association (Helsinki, 30 October 1983) argues that these methods should aim only to promote "human without threatening his integrity". The viewpoint of the medical world overlaps that of the Christian tradition. Various position were expressed throughout society, especially during the introduction of Human Embryology and Fertilization Law (1990) in United Kingdom, in fact the first country that has an institution empowered in this field.

The use of embryos and fetuses in research has been limited by the 1046 Recommendation of the Parliamentary Assembly of the Council of Europe (September 24, 1986), which specifies that all interventions of researchers and physicians are authorized, which support and contribute to child development.

The religious points of view are different but not too much. In Jewish tradition, the being conceived is considered "simple water" until the 40th day. The embryo elimination, until this moment, it is not considered abortion. The principle underlies the Jewish rabbinical law. Is punishable only the person that suppress an embryo life, after the 40th day.

The vast majority of Christian churches have always considered that human life begins in the moment of conception. Thus, the embryo has the status of the human person, with all rights derived from it. In vitro fertilization with the sole purpose of experimentation, breaks, in this view, the fundamental principles of Christian ethics. Likewise is understood the destruction of supernumerary embryos resulting from IVF techniques, being allowed only the interventions that do not endanger life and physic integrity of human being.

The control over the human reproduction is transferred consistently from society in general, to the scientific medical community.

The first scientific revolution on a large scale in human reproduction, arising from the meeting between IVF and genetics, has already passed beyond the planned stage. The initial concern of this revolution was the genetic diagnosis of IVF embryos before transplantation to the couples who have a potential for children with genetic abnormalities, becoming thus possible for people, not only to improve their own reproductive features but also to control the quality of the offspring.

The actual world is facing the fear of reaching the moment when we will be able to “choose” which children will be born, according to certain qualities, beyond the avoidance of genetic disease.

For sure, the science will not stop when will have full control of genetic diseases.

The medical science is not concerned only about diseases, but more important, about the removal of the unnecessary barriers against achieving the human wishes, specifically on the topic on which we are concerned here, the human desire to have offspring and passing the other barriers as age, sexuality, social or religious, that onetime were prohibiting, giving a new flexible feature for ethical boundaries up to now. The partial restrictions and prohibitions will limit further research which will make possible to satisfy these desires.

But, once we have the basic knowledge, it will be useless to try to maintain a policy of deliberate ignorance. There-fore, the society is building step by step but with discern-ment, the real world of human perfect perennial reproduction avoiding an endless series of ethical compromises.


Perhaps, at the end, in order to fulfill the Divine Word !

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