

# Moral issues of prenatal control

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**ABSTRACT:** The modern diagnostic methods that are used in the reproductive process are in position to provide a lot of useful information on the physiology of the embryo. This paper aims to discuss moral and social issues of prenatal control and the necessity to establish a specific legislative framework which regulates these issues, taking into account both the constitutionally guaranteed rights and social and ethical concepts in the context of Greek society.

*Key words:* prenatal control, embryo, choice of sex

## INTRODUCTION

The modern diagnostic methods that are used in the reproductive process are in position to provide a lot of useful information on the physiology of the embryo from the first stages of its development<sup>1</sup>.

Prenatal diagnosis is associated with the fetus. The term "fetus" in Greek literature refers to the entire period starting from the moment of conception or fertilization of the ovum (in vitro) until delivery<sup>2</sup>.

However, the knowledge of this genetic information raises moral and ethical issues associated with the treatment of the embryo as well as the data, which provides a map of the genes and which may not have exclusive medical use but also a use for eugenics.

With prenatal control future parents know if their embryo suffers from developmental abnormalities or serious diseases. However, taking into consideration that if the embryo suffers from abnormalities or diseases, intra-uterine therapeutic intervention is feasible only in minimal cases nowadays, future parents find themselves between two choices: they either accept the continuation of the reproductive process, being almost certain that they will bear a child with serious health problems, or they interrupt the pregnancy<sup>3</sup>.

## THE DATA OF THE REFLECTION-PRENATAL DIAGNOSIS<sup>4</sup>.

The term "prenatal diagnosis" means the control of the embryo *in vivo*, using certain methods, in order to identify early potential anomalies or disease. These methods are non-interventional or interventional. With the interventional methods, we examine the embryonic cells taken either from the amniotic fluid or from the trophoblast with amniocentesis. The interventional ante-natal examinations identify serious chromosomal abnormalities (for example the Down syndrome) and genetic diseases (for example the Mediterranean anemia, cystic fibrosis), and non-pathological phenotypic characteristics (for example the sex of the fetus). They are carried out today, usually in the first three months of pregnancy.

## MORAL AND SOCIAL QUESTIONS OF PRENATAL CONTROL

Genetic illnesses not only cause unpleasant and laborious situations to the individual that suffers but also his parents lead a life of pain, sadness, discomfort and stress. Consequently, no one can demand from a candidate parent to accept a child who is very likely to become seriously ill in the future, because the main emotions and financial burdens that are created by the birth of a sick child overwhelm the parents, and thus they decide on the cost of such a choice. According to the prevailing view, the fetus has no right to live, which would prevent the execution of prenatal screening and voluntary termination of the pregnancy, if there are abnormal data during the antenatal<sup>2</sup>. Even if we consider that the embryo has the right to come to life and offer to it every care and affection, this right is under the condition that it does not restrict the rights and claims of its parents<sup>5</sup>.

Another question that arises is that in the near or distant future it is likely the initial criteria of prenatal control to change and allow genes intervention for modifying and ameliorative aims. This involves changes that will alter the limits that signal the significance of illness and include objectives and cases that do not immediately threaten human life and health. For example, if genetic intervention is legitimate to prevent diseases which are considered serious by the scientific community, such as heart disease, diabetes, cancer, why not consider legitimate the gene intervention to treat other conditions currently not considered serious such as left-handedness, myopia, physiological short stature, etc<sup>6</sup>.

Societies will not bear the temptation to use intervention to genetic cells only for therapeutic aims and prenatal diagnosis will be altered in a genetic crisis<sup>7</sup>.

Particular dangers are included in the prospects extended by prenatal examinations for illnesses as syndrome Down to groups of so-called at risk populations. The generalization of prenatal testing would mean a health policy based on a political choice and discrimination, where the word prevention would be just another way to declare one's intention to control a disease with the demise of the patient.

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Moreover, eugenics involves a deliberate effort to control the genetic structure of human populations<sup>7</sup>.

Worthy to report are also moral dilemmas that result from the use of methods of prenatal control for the choice of sex of a child for reasons of social nature. The cases of choosing the sex of a child for medical reasons, to avoid having a baby that suffers from serious hereditary disease related to sex are those for which the diagnosis is acceptable. There is also the case that the choice of the sex of the child is for the purposes of social criteria.

If a liberal and democratic state allows sex determination it is like accepting that being a man or a woman is a social advantage or disadvantage, which clearly affects the institutionalized links between gender equality. Such unbalanced gender distribution may lead to discrimination against one sex or the other with similar effects in all areas of one's life and society in general. The purpose of the state is not a gender element welfare or misery<sup>8</sup>.

The possibility that science provides to the future parents of selecting if their child brings certain genetic characteristics also creates questions that are related to the subject of discriminations. If one accepts that the birth of a child suffering from a serious hereditary disease or disability is not desirable, so parents have an abortion, is this not a form of negative attitude towards people with disabilities? Prenatal diagnosis provides a solution eliminating people with disabilities, but this solution may reduce attention to non-genetic ways to improve the quality of life of people with disabilities.

Another ethical issue is the use of prenatal diagnosis for multi-factorial diseases, which is the diagnosis of a disease the occurrence of which depends on both genetic inheritance and environmental factors such as pollution of the environment, lifestyle, nutrition etc. For example, according to reports in the newspapers the first child was born which as an embryo had successfully undergone genetic testing related to non defective gene «TP53» associated with the occurrence of malignant tumors. But even if the gene had been diagnosed as defective, this would not necessarily mean that malignant tumor would occur, since its appearance depends not only on genetic but also on environmental factors<sup>10</sup>.

The issue of prenatal diagnosis for multi-factorial diseases is guided by both the Constitution of 2001, which provides that "everyone has the right of protection of health and genetic identity. The law provides for the protection of the person against biomedical interventions (Article 5 § 5 P.) "and by the Convention of the Council of Europe on Human Rights and Biomedicine (ratified in our country with Law 2619/1998 and which is in accordance with Article 28 paragraph 1 of S. precedence effect), which in Article 12 states that "genetic tests that predict the occurrence of genetic diseases were used either to identify the subject as a carrier gene responsible for disease or to detect a genetic predisposition or susceptibility to disease are only allowed for health reasons or for scientific research linked to health purposes, and subject to appropriate genetic counseling<sup>10</sup>.

The prenatal diagnosis of serious illnesses from which the unborn embryo suffers, such as Down syndrome and Mediterranean anemia is perhaps among the few cases where it could not be argued that free growth of personality and reproductive freedom (with its negative aspect of not

acquiring descendants) predominate the protection of the embryo<sup>10</sup>. The law could not require from someone to raise a child who will certainly suffer in his life. For this reason, and when, through intrauterine prenatal diagnosis, severe fetal abnormality is detected, the law allows abortion up to the 24th week of pregnancy, while the rule is that abortion is not an unlawful act only in the first 12 weeks of pregnancy.

Finally it is noted that any other use of antenatal screening to predict other properties of the child to be born (as morphological characteristics, height, weight) constitutes eugenics which is contrary to the principle of human dignity<sup>10</sup>.

### LEGISLATIVE FRAME AND SPECIAL BEGINNINGS

In our country the legislative frame that regulates the subject of prenatal diagnosis is mainly the laws on medically assisted reproduction, the provisions of The Penal Code on abortion as well as the provisions of the Convention of Oviedo, which have been incorporated in the Greek legislation. The first law that regulates the subject of medically assisted reproduction was the Law of 3089/2002 of "Medical Assistance in the Human Reproduction". With regard to the subject of prenatal diagnosis, the only reference is made in the first article, which defined that "medically assisted human reproduction (artificial insemination) is allowed to avoid the transmission of child serious illness." It also states that "sex selection of the child is not allowed, unless it is to avoid serious hereditary disease associated with sex." Afterwards, the most completed confrontation of the subject came with the Law of 3305/2005 of, where according to article 3 paragraphs 15 and article 10 paragraphs 1 there is a special report to the use of the method of pre-implantation genetic diagnosis, without, however, the law defining concrete genetic abnormalities for which the pre-implantation diagnosis is permissible.

Other provisions related to the subject are those of Article 304 of the Penal Code and refer mainly to artificial abortion and the protection of women's health. According to paragraph 4 of Article 304, artificial termination of pregnancy is not wrong when carried out with the consent of the pregnant woman by a doctor obstetrician - gynecologist and anesthesiologist participation in an organized nursing unit and if one of the explicitly stated conditions exists- any of the conditions concerning those pregnancies which have been identified with the modern means of prenatal diagnosis to have signs of serious fetal abnormality. For these cases, the provisions require that artificial abortion is legally permissible if the pregnancy does not last more than 24 weeks.

Greece, besides the enactment of those laws, has also ratified the Council of Europe in Oviedo since 1998.

### THE HELLENIC NATIONAL BIOETHICS COMMITTEE<sup>1,3</sup>

Regarding the issue of prenatal diagnosis, the Greek National Bioethics Committee, taking into account developments in the biomedical, ethical and social dilemmas that result from the use of new methods in the

reproductive process, considers that the choice of fetus is justified, as genetic ability of candidate parents after carrying out prenatal diagnosis. The use of modern technology takes place for the prevention of pain, suffering, exposure of a person to social prejudice, imposed by the respect for human dignity. The acceptance of children with health problems, even if it is based on certain metaphysical concepts (rather simple selfishness) of future parent, we cannot overlook the fact that it ignores the quality of future life of a young person. The prevention does not alter in any way the condemnation of adverse social discrimination against people who, by random reasons, are born and live with serious health problems.

The Commission's view that the embryo selection for the purpose of carrying out prenatal diagnosis is justified, as far as it is done for serious health reasons of the child to be born or to a third party.

#### **THE OPINION OF THE ORTHODOX CHURCH OF GREECE<sup>11</sup>**

Regarding the prenatal diagnosis, the representatives of the Orthodox Church of Greece have expressed their opinion.

The Church of Greece has expressed its disagreement on the opinion of the National bioethics committee on the issue of prenatal diagnosis. The Church "celebrates the good life as a sacred mystery despite of disabilities, defects or serious diseases". Also, it expresses its opposition to the view that considers abortion as morally permissible if diagnostic pathological fetal takes place, while challenging the criteria of seriousness of diseases and the future quality of life of children with a genetic disease. Finally, it describes the choice as fetal concealed racism and parental policy design.

#### **CONCLUSIONS AND PROPOSALS**

In order to avoid some of the ethical and social issues, and to ensure that diagnostic methods will not deviate from the permitted limits for their use, it is necessary to establish a specific legislative framework which regulates the issues of prenatal diagnosis, taking into account both the constitutionally guaranteed rights and social and ethical concepts in the context of Greek society. Only then will it be able to map these morally and socially unformed areas to establish a framework for the operation and promotion of this scientific knowledge.

## Προγεννητικός έλεγχος και ηθικά ζητήματα

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**ΠΕΡΙΛΗΨΗ:** Οι σύγχρονες διαγνωστικές μέθοδοι, που χρησιμοποιούνται στην αναπαραγωγική διαδικασία είναι σε θέση να παρέχουν πολλές χρήσιμες πληροφορίες για τη φυσιολογία του εμβρύου. Σκοπός αυτού του άρθρου είναι να σχολιάσει ηθικά ζητήματα που αφορούν στον προγεννητικό έλεγχο και την αναγκαιότητα θέσπισης ενός ειδικού νομοθετικού πλαισίου, το οποίο θα ρυθμίζει τα ζητήματα αυτά, αφού λάβει υπόψη του τις κοινωνικές και ηθικές αντιλήψεις της ελληνικής κοινωνίας.

*Λέξεις κλειδιά: προγεννητικός έλεγχος, έμβρυο, επιλογή φύλου*

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