

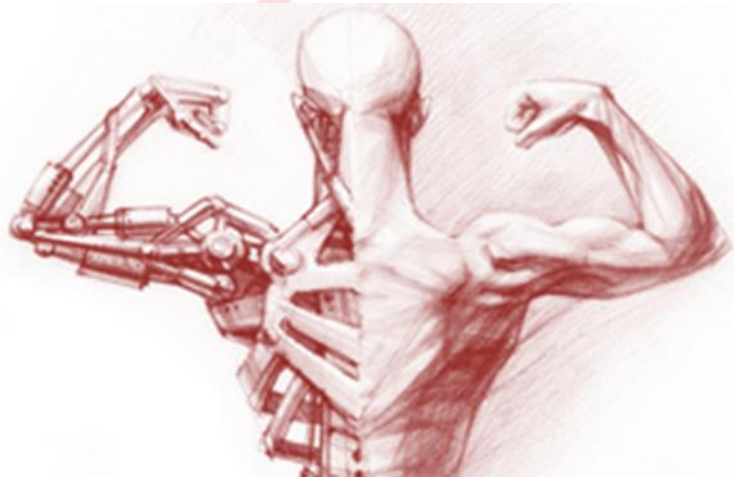



**NATIONAL BIOETHICS COMMISSION**

**OPINION**

**on**

**HUMAN ENHANCEMENT  
PHYSICAL ENHANCEMENT**





**HELLENIC NATIONAL BIOETHICS COMMISSION**  
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## Introduction

The Hellenic National Bioethics Commission met repeatedly upon invitation by the President in order to consider the ethical issues within its jurisdiction regarding “Human Enhancement”. This term includes medical interventions on the healthy body, aimed at shaping desirable characteristics, basically for psychological and social reasons (aesthetic preferences, increased physical or cognitive performance, etc.).

In view of the purpose of such interventions, which is not to treat health damages, specific issues arise concerning the extend of autonomy of the person interested and the appropriate approach of physicians. However, it is worth noting that, based on the broad definition of health provided by the World Health Organization, according to which “*Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity*”, such interventions are, undoubtedly, included in the practice of medicine, and therefore ruled by the general medical ethics.

One can distinguish various categories of enhancing interventions, depending on the purpose they serve. Thus, there are interventions that enhance:

- a) physical characteristics and abilities,
- b) mental characteristics and personality, and
- c) cognitive abilities.

The Commission considers that it is useful to issue an Opinion on the first category, which will precede the other two, so as to better highlight the relevant issues.

## **Improvement of physical characteristics and abilities**

The category of improving physical characteristics and abilities includes, in particular, the cases of:

- I) plastic surgery (surgical or non-surgical),
- II) enhancing physical abilities,
- III) using mechanical means of enhancement.

To examine the issue of physical enhancement, the Commission held hearings on Dr. G. Christodoulou, Emeritus Professor of Psychiatry, Medical School, University of Athens and Honorary President of the Greek Psychiatric Association, Dr. A. Mandrekas, President of the Greek Association of Plastic, Reconstructive and Aesthetic Surgery, Dr. G. Creatsas, Professor of Gynecology and Director of the 2<sup>nd</sup> Obstetrics and Gynecology Clinic, “Aretaieion” Hospital, Medical School, University of Athens, Dr. G. Vassilopoulos, Associate Professor of Pathology – Hematology, Medical School, University of Thessaly and Associate Researcher, Department of Genetics and Gene Therapy, Biomedical Research Foundation of the Academy of Athens, and Dr. C. Spiliopoulou, Associate Professor of Forensic Medicine, Medical School, University of Athens and President of the Hellenic National Anti-doping Council.

### **I. Plastic Surgery**

#### **1. In general**

Plastic surgery concerns surgical or non-surgical procedures designed either to reconstruct or to “correct” external body features.

*Reconstructive* procedures usually follow treatment after accidents (e.g. scar revision). *Cosmetic* interventions are purely aesthetic and correspond to a person’s desire to improve the appearance of his/her face or body (brow lift / eyebrow, nose, breast, liposuction, etc.), regardless of health issues. *Gender reassignment* surgery, is a special case, which must be addressed specifically.

In principle, the Commission considers that a person’s autonomy justifies the freedom of forming external features. The fundamental right to personality

development encompasses, undoubtedly, a person's control over his/her external appearance. However, that does not mean that plastic surgery escapes from the principles and rules of law and medical ethics.

## **2. Altering facial features and identity confusion**

A person's desire to change his/her facial features in order to cause identity confusion is a borderline case of self-determination, which may affect the public interest (e.g. in order to avoid legal prosecution). In this case, the Commission believes that certain restrictions on a person's autonomy are justifiable.

Consequently, the Commission considers that there is an issue regarding the physician's rights and obligations. In this case, the physician has a duty to review the relative desire of the person interested. Under particular conditions, this review justifies that the physician may refuse to carry out a procedure, however, without setting general and abstract rules. In this case, it is required to assess each case separately. However, it is not the physician's duty to report the incident to the law enforcement authorities, apart from exceptional cases in which, as the law provides, the offense of harboring a felon or crime concealment is constituted.

## **3. Plastic surgery and gender specific features**

In cases of altering gender specific features or even gender reassignment, plastic surgery is part of the therapy used. Hermaphroditism and gender identity disorder fall within these cases.

Regardless of the aetiology of a person's mental and physical condition, which may be due to neurodevelopmental or genetic causes, the Commission considers that such kind of procedures are essentially *reconstructive* and *therapeutic*, since they aim to match the psychosomatic disposition of a person with gender specific features.

In this case, the ethical principles and rules of law, as outlined in a previous Opinion of the Commission ("*Consent in the patient – physician relationship*," 2010) are entirely valid. The authentic will of the person him/herself is the determining factor here, in view of the right of personality. However, since there is a particularly

sensitive issue of autonomy, it is right to allow for a period of time between the initial decision and the plastic surgery procedure, during which the person concerned receives psychological and medical counselling.

According to the Commission, if prenatal testing results in ambiguous results about the gender identity of a foetus, an artificial termination of the pregnancy is not justified, especially since there are the aforementioned reconstructive options after birth. However, given that persons in this category (seeking plastic surgery to alter gender specific features or gender reassignment) belong to vulnerable social groups that generally suffer from social discrimination, access to relevant treatment must be ensured. For example, based on the principle of equality and the social right to health, the State may possibly develop counselling programs, but also provide therapy possibilities within the National Health System.

#### **4. Face Transplants**

Reconstructive face transplantation (e.g. in case of severe deformities caused by an accident) is, in principle, an acceptable alteration of the recipient's characteristics. However, it must be carried out in such a manner that it does not affect respect for the body of the (dead) donor. The relevant principle that rules transplants from a deceased donor is absolutely valid in this case too.

#### **5. The physician's role**

According to the Commission, the physician who carries out cosmetic plastic surgery has a particular responsibility, since he/she does not act in order to prevent a threat to a patient's health (or life). Unquestionably, the *consent* of the person interested is a prerequisite for any relevant medical intervention. However, it should be noted that in the case of cosmetic plastic surgery, the following particularities must be taken into account:

a) The physician has an *increased responsibility* to fully inform the person concerned as to the expected *outcome* and particularly the *possible side effects on his/her health*. This increased responsibility is explained by the need to prevent "easy" decisions by the person concerned, often influenced by obsessions with his/her body

image, by lack of confidence, or by occasional fashion standards, obsessions which may put in danger the health of this person.

b) As part of this responsibility, the physician must particularly consider the possibility of an underlying *psychological or psychiatric disorder* in the person concerned, and refer him/her for a psychological or psychiatric assessment. The physician should not comply with the wishes of the interested person in an uncritical manner, since there may be defects in the person's will that affect the validity of his/her consent. Individuals with *Body Dysmorphic Disorders* (BDDs or dysmorphobia) fall into this category, and indeed, plastic surgery offers no actual prospect of improving their condition.

## **6. Production of a code of conduct**

The Commission indicates the lack of a specific *Code of Conduct* for plastic surgery and recommends that the relevant scientific societies should produce such a code, with the assistance of the Ministry of Health.

The relevant code must refer to the general obligations of physicians towards the persons interested -especially the increased responsibility to fully inform the person concerned- and may include specific chapters on different types of procedures, so that the above mentioned obligations are adjusted accordingly.

## **II. Enhancing physical abilities**

### **1. In general**

The enhancement of physical abilities usually includes characteristics such as physical strength, speed, agility, endurance, accuracy, motor coordination and dexterity. The artificial enhancement is achieved mainly by the use of pharmaceutical substances combined with physical exercise.

The Commission considers that, in the frame of the general right to personality development, improving physical abilities is, in principle, a legitimate choice.

However, the Commission notes that this choice is subject to restrictions, which are related both to the person him/herself and third parties.

## **2. Safe use of substances for a person's health**

It is imperative to protect a person's health from potentially harmful enhancing substances, given that many of them are freely available in the market, with no prescription required.

Regardless of the autonomy of the person in various health issues, the Commission emphasizes the importance of the strict control over these substances by the competent authorities, and particularly the importance of providing complete and accurate information to consumers regarding any possible side effects.

For substances administered after prompt (either by sports medicine physicians, or gymnasts, trainers etc.), the relevant responsibility -moral, but also legal- belongs primarily to those who recommend the substance use. Regarding the apportionment of responsibility, it should not be overlooked that the interested persons that use them are more vulnerable to inaccurate or misleading information, as they often choose to enhance their physical abilities and performance and consider that such enhancement is, by default, desired and "innocent", with no special consideration of the potential health effects.

## **3. The interest of third parties, particularly in sport**

The Commission also dealt with the case of enhancing abilities through doping, in order to participate in athletic contests. The Commission pointed out that the use of relevant substances must be controlled, not only in order to preserve equality in competition, but also to protect the athletes' health.

In particular, the following points are exceptionally significant:

i) Prohibition of the use of certain substances in sport is not only related to the impressive results concerning the primacy of the athlete that uses them, but also to the serious risks to his/her health. This means that, even if one assumes that all sport participants can have equal access to such substances, the use of the latter would still



be unfair, not for reasons of fairness, but because the endangerment of health is incompatible with the very notion of rivalry.

ii) Enhancing physical abilities by other means (e.g. strenuous exercise in particular environmental conditions) could also be equated with substance use, provided that the risks for one's health were equally serious. As long as these risks are not established, the conditions of rivalry should not be considered as adulterated for this reason alone.

iii) New genetic technologies, such as gene therapy or gene transfer in athletes, are forms of doping, which are not currently detectable. In cases of gene doping, the risk to the athletes' health is even greater, due to the novel and often experimental methods applied. However, it should be emphasized that -according to the latest scientific data- such methods are at a research stage, even when they are used to treat patients.

Based on the above considerations, the Commission notes the necessity of constant vigilance by the anti-doping authorities in our country, especially after the repeated cases during the last years.

The Commission points out the special role of the Hellenic National Anti-Doping Council (ESKAN) for the prevention and fight against doping. It would be appropriate for ESKAN to acquire organizational independence (in the form of a legal entity or even of an independent authority), to apply its jurisdiction at all levels of athletic contests (even in schools) and possibly complement its authority with the potentiality to impose all the relevant sanctions in cases of law violation.

In addition, the Commission considers that reinforcing athletic research will contribute to inform properly the future athletes about their actual physical abilities, whereas underpinning the athlete's medical support will act as a deterrent to the use of doping methods.

Finally, the Commission highlights the importance of responsible publication of anti-doping test results, particularly by the media, in order to avoid the risk of stigmatizing sport and athletics overall. The disproportionate publicity of the offender athletes and their associates does not serve in favour of preventing the doping

phenomenon effectively; on the contrary, it discourages young people from being involved in sport and consequently deprives them from its indisputable benefits.

#### **4. Physical enhancement for military purposes**

Physical enhancement may also be applied to a military, operational level. In particular, it is not unlikely that one can justify the enhancement of physical characteristics of soldiers, in the name of national interest and national security. Indeed, this may be associated with experimentation on humans, which would be potentially banned in case the relevant research involved ordinary citizens.

The Commission considers that physical enhancement of soldiers is subject to the general rules of conducting research involving human subjects. Amongst these rules, the special informed consent of the person participating in the process of enhancement is a necessary prerequisite. Beyond that, the Commission notes that in research concerning physical enhancement of soldiers, transparency is particularly important, which is, however, often in contrast to the confidentiality required by such cases. In this occasion, the necessary information may be available to a third party/organization which will ensure not only the proper conduct of research but also the confidentiality of information.

Finally, for the military physician who participates in such a research, the Commission considers that, additionally, all the rules of medical ethics apply, including those related to clinical research.

Athens, 08 April 2013