

The Medicine-society Relationship in the Debate on Human Enhancement

Francesca Marin

CIGA, Centre for Environmental Law Decisions and Corporate Ethical Certification,
University of Padua, Italy – francesca.marin@unipd.it

Abstract

The unprecedented development in the fields of biomedicine and the diffusion of sophisticated technologies has led to a rethinking of medical practice. In particular, human enhancement makes this re-examination urgent because in general it refers to enhancing healthy human beings with medical means to improve their abilities and traits. In other words, through human enhancement there is an application of medical knowledge and technologies to issues that are not originally thought as medical ones: medicine is not simply used to overcome biological pathologies, but to actually improve human capacities. Nevertheless, it would be wrong to exclusively explore this aspect within the conversation about the proper aims of medical practice, neglecting the purposes of society. Indeed, medicine does not exist in isolation and it must be in dialogue with the society it serves.

If that is true, what kind of relationship can be established between the proper aims of medicine and the purposes of society? Is there any order of priority? Should medicine be constantly redefined on the basis of social needs/desires?

To discuss these issues, the paper will be developed in three stages: first, by focusing on the therapy/enhancement distinction and its limitations; second, by referring to the ends/goals of medicine distinction proposed by Edmund D. Pellegrino; third, by analysing the latter distinction as regards the debate on human enhancement.

Keywords: Human Enhancement, Therapy, Vulnerability of the human being, Ends and goals of medicine

Introduction

Although medicine has been changing continuously throughout history, the unprecedented development in the fields of biomedicine and the diffusion of sophisticated technologies have led to a rethinking of medical practice. In particular, human enhancement makes this re-examination urgent because in general it refers to enhancing *healthy* human beings with medical means to improve their abilities and traits. As a matter of fact, a wide variety of promising biotechnologies may increase our possibility of enhancing human performance, for example avoiding memory loss, altering our mood, and slowing senescence. Also, the development of reproductive technologies (genetic screening and genetic engineering) could be used to insert genes that are not present in the gene pool or to alter the so-called non-disease genes, genes that do not cause a genetic disorder or do not predispose one to the development of disease. While at the present the tools of genetics, such as vitro fertilization (IVF) and preimplantation genetic diagnosis (PGD), allow us to test the embryos for disease traits and to select offspring on the basis of this information, in the future these technologies might be used to test for non-disease traits, such as intelligence and memory. Thus, it might be possible to select the child with the best intelligence or memory profile.

We already have powers to alter our capacities, for example with the use of stimulants or psychoactive drugs; nevertheless, if the use of biotechnical powers has mainly been indicated to heal the sick and relieve the suffering, the attractive biomedical technologies could serve purposes that go “beyond therapy” [1]. For example, techniques for boosting muscle strength could be used not only to treat muscular dystrophy but also to enable athletes to attain a superior performance. A central nervous system stimulant as Ritalin, prescribed for the treatment of attention deficit hyperactivity disorder (ADHD), might be utilized by untreated ADHD students to enhance their cognitive performance.

In other words, through human enhancement there is an application of medical knowledge and technologies on issues that were not originally thought of as medical ones: medicine is not simply used to overcome biological pathologies (*restitutio ad integrum*), but to actually improve human capacities (*transformatio ad optimum*) [2]. Nevertheless, it would be wrong to exclusively explore this aspect within the conversation about the proper aims of medical practice, neglecting the purposes of society. Medicine does not exist in isolation and it must be in dialogue with the society it serves. This means that reflecting on medicine and its aims needs to take the social frame within which medical practice comes to fruition into account.

If this is true, what kind of relationship can be established between the proper aims of medicine and the purposes of society? Is there any order of priority? Should medicine be constantly redefined on the basis of social needs/desires?

To discuss these issues, the presentation will be developed in three stages: first, by focusing on the *therapy/enhancement distinction* and its limitations; second, by referring to the *ends/goals of medicine distinction* proposed by Edmund D. Pellegrino; third, by analyzing the latter distinction as regards the debate on human enhancement.

The therapy/enhancement distinction

The distinction between therapy and enhancement is often introduced in discussions regarding the status of medicine to specify what falls within and outside medical practice, circumscribing its tasks and activities. From this point of view, “therapy” is the use of biomedical power to treat diseases or disabilities and relieve suffering, and “enhancement” refers to any biotechnical interventions that alter non-disease processes to improve human performances. Through this approach, an enhancing intervention is therefore understood and described as contrary to a medical treatment: while the latter addresses the health problems created by diseases, the former refers to any improvement in human abilities and normal traits that do not respond to legitimate medical needs.

At first glance, making such a distinction between therapy and enhancement could be basically useful for two reasons; on the one hand, it might help to determine the role of medicine and the physicians’ duties, defining the boundaries of medical practice and specifying what doctors should or should not do. On the other hand, the therapy/enhancement distinction might contribute to defining a basic package care, delineating precisely what services systems of health care should and should not reimburse. Therefore, if such a distinction is correct, it has practical and normative relevance because it circumscribes the medical activities and it distinguishes the ethically acceptable uses of biomedical technologies (therapeutic treatments) from the ethically unacceptable or dubious ones (enhancing interventions).

Although it could offer these advantages, the therapy/enhancement distinction is inaccurate and highly problematical given the difficulties to justify it both on a theoretical level and a practical one. Firstly, it is not easy to define what “therapy” and “enhancement” mean because these notions refer to other complex and controversial concepts, such as “health”, “disease”, and “normality”. If the therapy/enhancement distinction relies on these notions, the following questions come to the forefront: exactly what does being “healthy”, “normal” mean? How can we define a “normal healthy state”? Given the complexity connected to any attempt to draw a specific line between “health” and “disease”, the therapy/enhancement distinction can be criticized on its theoretical grounds. Secondly, this distinction seems troublesome at a practical level as well because interventions that are originally developed for therapeutic goals could later count as enhancements. Indeed, “therapy” and “enhancement” are overlapping categories given that successful therapeutic treatments are enhancing interventions too. Also, how should prevention activities be considered? Are they treatments or enhancements or something else? As a matter of fact, preventative therapeutic interventions strengthen the body’s abilities and functions, and reduce the probability of disease and death. Consequently, these interventions seem to be enhancement.

In light of all these conceptual and practical problems, does it still make sense to refer to this vague distinction? As argued by Erik Parens:

It would be a mistake to think that the therapy/enhancement distinction will ever provide good, transparent moral guidance about the particular decisions faced by individuals such as doctors or institutions such as managed care companies [3, p. 24].

However, despite its several limitations, this distinction could help to begin, and not to end, a conversation about medicine. Quoting Parens:

There is a big difference between hoping that a given distinction can begin conversation, and thinking it can end one [3, p. 10].

After the several difficulties connected to the therapy/enhancement distinction are recognized, it may then be used as one way to begin conversations about medical practice and its aims. In this way, further considerations related to the status of medicine could be developed in light of its contemporary possibilities. Indeed, traditional definitions of medicine that describe it as a human activity simply aimed to treat diseases or disabilities and to maintain a healthy state do not capture the complexity of modern scientific medicine and its several practical dimensions. Besides the role of contemporary medicine in the prevention and treatment of diseases, there are other uses of biomedical power to satisfy individual desires (for example requests for cosmetic surgery motivated by a desire for beauty) and to expand human choice and possibility (for example with the use of reproductive technologies in order to “design” babies or improve their native equipment).

Taking all these purposes of medicine into consideration, is there any differentiation among them? Should they be examined in the same way or could any order of priority be suggested?

Regarding the nature of medicine and its goals, two main approaches have been offered in the bioethics debate: the *inherentist position* and the *social construction view*. The former is grounded on the nature of medicine and holds that the ends of medical practice grow out of the universal human experience of illness. Indeed, this approach defines the ends of medicine from the permanent phenomena of the clinical encounter and considers care, cure and healing as what makes medical practice what it is. These ends distinguish medicine from other human activities and give it a fixed essence. On the contrary, moving from the great variation of the nature and the goals of medicine throughout its history, the social construction view rejects that there is something permanent about medicine; as a consequence, this approach affirms that the goals or purposes of medicine have to be continually redefined by each social community it serves.

Published in 1996 and gained from a research project initiated in 1993 and coordinated by Daniel Callahan, The Hasting Center Report on *The Goals of Medicine. Setting New Priorities* faces both the advantages of these two approaches of the derivation of the goals of medicine and the deep opposition between them¹. The Report then suggests “a reasonable middle ground”:

Medicine has essential ends, shaped by more or less universal ideals and kinds of historical practices, but its knowledge and skills also lend themselves to a significant

¹ This Report provides an analysis of contemporary medicine, focusing on its aims as well as its new and varied potentialities. The opening pages take into account the several reasons (identified as “new pressures”) that make a reexamination of the goals of medicine particularly urgent, and the topic of human enhancement is one of them (the other reasons are: the scientific and technological developments, balancing the curative bias, aging populations, the market and public demands, cultural pressures, and the medicalization of life) [4, pp. 6-12].

degree of social construction. It is a reduction of the former to the latter that is the real danger, not holding both in a fruitful tension with each other [4, p. 17].

Although The Hasting Center Report recognizes the need for a dialogue between medicine and society, it does not establish any order of priority between the purposes of medicine defined by its historical practices and those shaped by social construction. Also, affirming that a certain tension among these aims is fruitful, it does not suggest any solution when they are in conflict.

In my opinion, Edmund Pellegrino (Chairman of *The President's Council on Bioethics* from 2005 to 2009) provides further important considerations to the middle ground approach provided by the Hasting Center Report. Defending what he prefers to call an “*essentialist approach*”, Pellegrino introduces a distinction within the several aims of medical practice: the ends/goals of medicine distinction. Furthermore, he suggests a certain kind of relationship between the ends and the goals of medicine that could be useful in the debate on human enhancement.

The ends/goals of medicine distinction

In order to analyze the nature of medicine and to grasp what makes it a different enterprise compared to other human activities, Pellegrino proposes a phenomenological and teleological approach to the clinical encounter. Seeking a foundation for medical morality independent of any previous philosophical theories, this approach is based on the analysis of the three phenomena specific to medicine: the fact of illness, the act of profession, and the act of medicine. For Pellegrino, the universal human experience of illness and the resulting need of sick people for *care, cure, and healing* give medicine its essential character. These aspects distinguish medical practice from other human activities and permit its permanence. Indeed, medicine comes into being because people get sick; quoting Pellegrino, “medicine and physicians exist because humans become ill” [5, p. 27].

When illness occurs, a human being perceives an altered state of his existence because he detects some changes in the functions of his body or his mind and considers himself no longer “healthy” (understood here as a fluid and multi interpretable word), no longer “whole”. The person who is ill lives an existence characterized by *anxiety*, and this is basically due to these two reasons: on the one hand, he does not know the causes of that altered state of his existence and he lacks the knowledge and the skills necessary to cure himself; on the other hand, he cannot be sure he will be “healthy”, “whole” again. Also, a particular *vulnerable state* derives from illness because human freedoms are compromised, alterations in lifestyle are imposed, and the images of the self and the body are subjected to relevant changes. Because of illness the body stands opposite to the self and is no longer an instrument of our will, impeding our choices and actions. For all these reasons, Pellegrino affirms that

the state of being ill is [...] a state of “wounded humanity” of a person compromised in his fundamental capacity to deal with his vulnerability [5, p. 28].

The author describes illness as an *ontological assault* on the humanity of the person because it erodes the body-self unity and forces a rethinking of human existence and a reappraisal of life plans.

From Pellegrino's point of view, being ill means being forced to seek assistance, whether voluntarily or not, from another person, i.e. the health professional, determining a need for healing, a need for the patient-physician relationship.

Becoming a patient, someone who is ill has to place himself under the power of another person, who professes to have the necessary knowledge and skills to heal. As emphasized by Pellegrino, this aspect is confirmed by the etymology of the word "profession" because it derives from the Latin verb *profiteri*, which means "to declare aloud or publicly"; concerning the health professional

he/she "declares aloud" that he has special knowledge and skills, that he can heal, or help, and that he will do so in the patient's interest, not his own [5, p. 29].

Determined by the fact of illness, the patient-physician relationship is always described in terms of an inequality of knowledge and skills because it is established between an existentially vulnerable person seeking assistance and another one who professes to provide it. Given this not eliminable inequality, the patient-physician relationship cannot be simply regarded as a contract between equals because the professional holds the balance of power and the patient is therefore forced to trust him.

From Pellegrino's point of view, another phenomenon that characterizes medical practice is "the act of medicine", which is the specific action that identifies that profession. Medicine is actually realized when a clinical decision is made and "a right and good healing action" [5, p. 30] takes place; these aspects bring together the physician's knowledge and skills and the patient's need to be healed, and constitute medicine *qua* medicine. Quoting Pellegrino,

this central act is the vehicle of authenticity and the bridge which joins the need of the one seeking help with the promise of the one professing to help. [...] It is a choice of what is right in the sense of what conforms scientifically, logically, and technically to the patient's needs and a choice of what is good, what is "worthwhile" for this patient [5, p. 30].

Accordingly, the therapeutic action can be individualized through a shared inquiry because it needs the physician's competence to be technically correct and the patient's agency to respect his values. For Pellegrino, the act of medicine is the end of the clinical encounter because in this special kind of human interaction, physician and patient work together for the same task of healing. As already noted, someone who is ill needs to be healed and the health professional responds to this need, and therefore the fiduciary relationship aims to the same end: the patient's good.

To sum up, the fact of illness, the act of profession, and the act of medicine are the essential features of medicine *qua* medicine because they characterize medical practice whenever and wherever it takes place. Being mortal, humans become ill, need help, and are forced to seek assistance from those who profess to be healers. The consequent clinical encounter reveals its teleological structure because it aims to a specific end, i.e. a right and good healing action, shared by the subjects involved in that particular relationship.

Within this phenomenological and teleological approach *care*, *cure* and *healing* are the *ends* of medicine: in the classical sense of *telos*, ends are essentially defined and

ontologically related to the nature of medicine. Ends are the essence of medicine and they serve to define medical enterprise; as just noted, they are discerned by reflecting on the patient-physician relationship, that is on the peculiar relationship of healing and helping that has always been typical of medical practice and will always be in the future. Therefore, these ends are permanent and intrinsic to medicine and they characterize medical enterprise whenever and wherever it takes place.

Although the phenomenological and teleological approach proposed by Pellegrino is particularly focused on the clinical encounter, it does not imply an exclusion of the social context. Indeed, apart from the ends, his essentialist model acknowledges the presence of the *goals of medicine* [6]; by introducing this expression, Pellegrino refers to what society may wish to attain through biomedical power for uses other than care, cure, and healing. For example, the use of medical knowledge could be influenced by cultural and social pressures and used for nonmedical purposes to satisfy human desires and to attain economic or political advantages. Given that goals are externally defined and not built into the nature of medicine itself, they may or may not conform to the ends of medicine [6, p. 59]. Indeed, the goals are not necessarily tied to the essence of medical enterprise; this means that they are subject to many interpretations and they may be altered by individuals, societies, or governments.

In Pellegrino's opinion, a relationship between the ends and the goals of medicine must be established because medical practice comes to fruition within a particular social context. As a consequence, a dialogue between medicine and society must be encouraged [6, p. 65]. Also, in order to meet health care institutions' needs as well as social needs a certain kind of modification within the medical field is possible and inevitable. For example, although medicine advances the healing, caring and curing ends, a just distribution of health care resources must be advocated on the basis of their availability. Nevertheless, for Pellegrino, *the goals of medicine cannot completely replace the ends of care, cure and healing* because this change compromises the integrity of medicine itself [6, p. 65]. If such a transformation occurs, medicine may be used exclusively to advance economic or political purposes, or subdued to social ideology. As a result, the nature of that peculiar human activity that arises from the universal human experience of illness and the resulting need for healing could be deeply compromised.

Therefore, the ends have priority over the goals of medicine and, differently from what has been suggested by The Hasting Center Report, Pellegrino's approach establishes an order of priority among the several aims of medicine and provides a basic criterion to deal with conflict situations.

A constant critical reflection on the goals of medicine is thus required to verify if they are distorting or impairing the capacity of medicine to achieve its proper ends. In order to ensure that the goals of medicine conform to the ends, Pellegrino suggests a careful analysis of the clinical encounter and its teleological structure: by examining this peculiar human interaction, the essence of medical enterprise can be gathered and what may enhance the ends of medicine can be encouraged.

Some possible practical implications

In light of the unprecedented development in the fields of biomedicine and the diffusion of sophisticated technologies, the essentialist approach proposed by Pellegrino could be useful, basically for two reasons: on the one hand, it defines the ends of medicine and specifies the reasons for preserving them; on the other hand, it allows for a certain kind of modification within medical practice by recognizing the presence of the goals of medicine. Therefore, this theoretical model encourages a dialogue between medicine and society, but it asserts that economic, political or ideological pressures cannot distort the intrinsic ends of medicine.

In particular, regarding the topic of human enhancement, the ends/goals of medicine distinction reminds us that a *complete* application of medical knowledge and technologies to enhance *healthy* human beings is problematical because it modifies that human activity which is essentially oriented towards providing care and cure to *sick* people. As pointed out by Pellegrino, if this radical transformation of medicine was to occur and enhancement was to be considered an end of medicine, the term “patient” would be extended to anyone unhappy with his abilities or traits and the process of medicalization would influence all aspects of human existence [7]. Furthermore, several consequences would characterize the medical enterprise and its practical dimensions. Quoting Pellegrino:

The number of physicians needed would skyrocket; access by those with disease states would be compromised; research and development could become even more commercialized and industrialized. Research resources would be channeled away from therapy per se. The gap in access to therapy between those able to pay for doctor’s time and those who cannot would expand. To make physicians into enhancement therapists is to make therapy a happiness nostrum, not a true healing enterprise [7].

Here we face the therapy/enhancement distinction again and, to those who criticize it, Pellegrino replies that medical treatments could be described as enhancement interventions because as often as not they make patients feel better, regaining their functional capacity. Nevertheless,

this kind of enhancement follows therapy and is part of the aim of therapy – not “beyond” therapy but a result of it. This is different from enhancement as a primary intention. Here we start with someone who has no disease or obvious bodily malformation [7].

Related to the proper ends of medicine, the therapy/enhancement distinction is thus still useful and it may be helpful to distinguish the different medical uses of biotechnological advancements. Therefore, when enhancement becomes a primary purpose of the use of biomedical power, this goal does not adhere to the intrinsic ends of medicine. Indeed, thus intended, enhancement interventions aim to improve abilities and traits of healthy human beings whereas medicine arises from the universal human experience of illness and the resulting need for healing. As an end in itself, enhancement threatens the integrity of medicine and its essence, increases the physician’s responsibilities and finally, compromises the access for those who need healing. For all these reasons Pellegrino asserts that

preserving the ends of medicine, and not just the goals society may construct for medicine, is an essential safeguard not simply for the integrity of medical ethics and practice, but for the safety and wellbeing of all the vulnerable members of our society [6, p. 67].

Therefore, what is at stake here is not simply the status of medicine, but rather the safeguard for the vulnerability of the human being and his ineliminable finitude: being mortal, humans become ill and vulnerable, need help, and are forced to seek assistance from those who profess to be healers.

In my opinion, all these aspects should be taken into account to continue a dialectic and fruitful relationship between medicine and society. In this way, medical enterprise will persist in helping sick people, and, at the same time, it will be open to respond to social requirements by verifying their conformity to its ends of care, cure and healing.

References

- [1] President's Council on Bioethics. 2003. *Beyond therapy. Biotechnology and the pursuit of happiness*. Washington DC, Government Printing Office.
- [2] Wiesing, Urban. 2008. "The history of medical enhancement: from restitutio ad integrum to transformatio ad optimum?" In *Medical enhancement and posthumanity*, ed. Bert Gordijn, and Ruth Chadwick, New York, Springer, pp. 9-24.
- [3] Parens, Erik. 1998. "Is better always good? The enhancement project", in *Enhancing human traits. Ethical and social implications*, ed. Erik Parens, Washington DC, Georgetown University Press, pp. 1-28.
- [4] Project Report. 1996. "The goals of medicine. Setting new priorities" in *The Hastings Center Report* Vol. 26, Special Supplement November–December, pp. 1-28.
- [5] Pellegrino, Edmund D. 2001. "Toward a reconstruction of medical morality: the primacy of the act of profession and the fact of illness" In *Physician and philosopher. The philosophical foundation of medicine: essays by Dr. Edmund Pellegrino*, ed. Roger Bulger, and John McGovern, Charlottesville, Carden Jennings Publishing, pp. 18-36.
- [6] Pellegrino, Edmund D. 1999. "The goals and ends of medicine: how are they to be defined?" In *The goals of medicine: the forgotten issues in health care reform*, ed. Mark J. Hanson, and Daniel Callahan, Washington DC, Georgetown University Press, pp. 55-68.
- [7] Pellegrino, Edmund D. 2004. *Biotechnology, Human Enhancement, and the Ends of Medicine*. The Center for Bioethics & Human Dignity. Available from: <http://cbhd.org/content/biotechnology-human-enhancement-and-ends-medicine> (Accessed 30 November 2004).