Medicine, health and the human side: responsibility in medical practice

Gabriela Palavicini¹

Accepted: 2 January 2022 / Published online: 8 January 2022
© The Author(s), under exclusive licence to Springer Nature B.V. 2022

Abstract

Throughout history, the world has been concerned with progress in different areas, and Medicine has not been the exception. Nevertheless, has this progress been positive in the sense of entailing benefits? The question emerges considering that through this progress, human beings have been able to modify natural processes. Considering this, the research question is: What is the role that medicine—a human and scientific discipline—must play, and which is the concept of what a human being must have in a world where utilitarianism prevails over non-material benefits? Also, what are the implications of that role and concept on the decision-making about health, notions about humanity and, areas which require responsibility? The rise of artificial procedures which generate life, simultaneously defying time leads to the main objective of this paper: To present ideas on the current perception about the medical practice; in terms of responsibility about the human side of the patient, related to artificial practices. A second objective is to approach a social topic that motivates to reflect on new and recurring practices in the medical field. This topic will be studied from a hermeneutical perspective to establish relations and an interpretative approach between them, through Thiebaut's work and Tría's Philosophy of the Limit, considering the concept of human being and considering that there are limits which should be respected. Afterwards, the focus will be on the medical *praxis* and its sense of responsibility regarding human beings.

Keywords Limit · Medicine · Human sense · Contemporary “artificial” practices

*“Wherever the art of Medicine
is loved, there is also a love of
humanity”.*

Hippocrates

Introduction

It might seem that Medicine and Philosophy are two completely separate areas of study; that the path of medicine would never cross the one of Political Philosophy. How can it be thought that there is something in common between these two disciplines? Is there common ground, or is it preposterous to try to connect them and study what is happening in Medicine today through the perspective of Political Philosophy, which would seem to have such a different area of study? In this paper, it is established that even if Medicine

has been considered a “special” discipline, with little in common with the Social Sciences and the Humanities, when it is studied from a non-clinical point of view, theories can be found, which are useful to understand its nature, or what has been settled as its *raison d'être* for so many years since Medicine's primary interest is the human being.

Philosophy and Medicine have not always been dissociated, and we think they should not be. Nevertheless, nowadays there seems to be no relationship between them; they go their separate ways, without ever running into each other. However, it seems interesting, first, not to forget that “Greek philosophers and physicians, even before Socrates asked the same questions: What is a man? What is his essence? How does he function? Both disciplines tried to explain the stability of the body and its capacity for transformation” (Golub 1996, p. 48, trad). And second, to reconcile these disciplines in a discussion that would try to invite readers to think from the perspective of Political Philosophy—a field-oriented to thinking about what takes place in a city and that concerns its citizens, its people—on what has been happening today in the medical practice.

✉ Gabriela Palavicini
gpalavicini@itesm.mx

¹ Tecnológico de Monterrey, Monterrey, México

On the one hand, it is undeniable that Politics, as well as Medicine, should look after people's wellbeing: both disciplines must care about citizens' quality of living and generate high standards for it.

However, if the surroundings where human beings live do not provide the conditions required for development, and there is social inequality, poverty, and scarcity affecting their wellbeing the quality of living degrades, the lack of healthy behaviors and practices bring about illnesses, to those who suffer the immediate consequences, of course, but also to the State, regarding decision-making about policies, increasing expenses and the need for medical attention. In those cases, if necessary, human conditions are not taken into consideration, science cannot always provide solutions. This means that an individual's life is at risk, as has been demonstrated since certain medical practices began. Up until the 19th century, finally, sanitary policies were implemented in England, under the Public Health Minutes (1848); drain pipes and sewer system in Germany (1850); and the sanitary system based on economic policies, oriented to enhance the quality of life in France (Golub 1996, pp. 76–98). Considered in a broader sense, without the more elemental conditions and altering natural processes through technological advances, even humanity could be in danger. Society and science go together; there is no way to separate them because science contributes to society's progress and society allows this to happen. Under this consideration, taking into account that Medicine is a scientific field, it cannot be forgotten that the practice of Medicine must contribute to benefit society. This means helping the population recover their health when they are ill and remain healthy afterwards. Thus, it maintains its human character, accomplishing that: "Science must be used to dominate nature for humanity's benefit" (Bacon in Kottow 2009, p. 6).

Medicine is thought of as a discipline that must preserve its nature and essence, being aware of the responsibility it holds and combining it with prudence. Being aware of the responsibility and being prudent draws a line between pure ambition and the humanitarian side, between probability and possibility and, between illusion and reality. This means to act from the perspective of border reasoning, in good conscience and prudently, virtuously, allowing "good decision-making" regarding the integrity of the patient. In this sense, thinking, knowledge, and values would prevail over actions devoid of reflection, guided by a utilitarian predisposition, present in the "hidden world" of any person.

Considering what was previously stated, as it can be reviewed in the scientific literature on this topic, Philosophy and Medicine have a connection that goes back to Aristotle and Galen. Even if they belong to different periods in time, they both were interested in anatomy as well as in understanding the human body and studied it through theoretical approaches and empirical observation, therefore

Galen will also be mentioned related to the medical praxis. Galen is known as a physician, but he was also a philosopher and influenced on the study of Philosophy and Logic, as did Aristotle, who is mainly known for his contributions to Philosophy and Ethics, but who also had an influence on Biology as well (Adamson 2016). Additionally, his thinking involves implications for medical ethics being Galen a surgeon himself, and for his time, before an observable empirical fact, there was thinking, and a mere interpretation of right and wrong. This involves a questioning about the present-day idea of the generation of knowledge and the implications of this: Any sort of information can be accessed from anywhere; this is an age in which technology prevails over knowledge. The "results" on the value and the action of thought are directed by superficial conducts not by ideologies. An age in which technology has changed the way humans study, learn and solve problems in almost every discipline, including Medicine, the field which represents the art of serving humanity. Nevertheless, the strong belief that in this profession, "a physician must exercise his mind in rational thought" will remain; as Galen established in his work titled "The best doctor is also a philosopher" (in Brain 1997, p. 937), where he states that a doctor must possess all the parts that makeup Philosophy: logic, science, and ethics (Brain 1997, p. 937), and that he or she must behave in accordance to them before carrying out heroic practices which only respond to personal wishes and/or to a utilitarian execution at the expense of ethical and moral behavior/action, favoring technology above knowledge and values.

In this paper, the focus are the right and the wrong ways to develop medical conduct and Galen's thinking is strongly related to these aspects in the sense of respecting the essence of the discipline; its art of healing which must frame the ethical action. According to Thiebaut (2001), ethics is "the other face of truth, an interpretation of historical times of going back and forward, to which knowledge refers" (My translation). This is the reason why Thiebaut's thinking adds value to this work, since he joins the idea of teleonomy in the sense that he considers that in "the realm of practical life we are oriented 'forwards' and the subject has a performative and projective attitude; this dimension becomes opaque when the interpretation of such practical life is understood as the result or product (and is understood as moving backwards)" (Thiebaut 2001).

In this sense, the responsibility of consequences must be assumed pointing out very clearly what damage is and the responsibility related. (Thiebaut 2001). These ideas seem to be necessarily considered in the medical practices facing progress.

On one side, a moral action or behavior would be the one inspired by dignity, values, and thinking, which means that is directed at how things should be in the medical *praxis*. On the opposite side, some actions will be found, which

are exclusively focused on the individual's autonomy without any consideration for such things as dignity, values, and concern about the patient. These non-axiological or non-thoughtful conducts, according to Galen, are opposed to the nature of Medicine, as he states: "It is impossible to pursue financial gain at the same time as training oneself in so great an art [as medicine]", (art in the sense of *technai*, arts that can be taught and learned systematically and benefit humankind, by intellectual practices (Rosen 2015). As Gay said in Wellman, quoted by Golub (1996, p. 99) "Medicine is philosophy in action; philosophy is medicine for individuals and society" (My translation).

Therefore, in the next section, the limits of Medicine relating to its humanity will be reviewed. For this purpose, first, it will be considered Trías' Philosophy of the Limit, following an outline of how some of the artificial medical practices are perceived, which confront the original spirit of Medicine: to restore the patient's health from rational and axiological actions based on a sense of responsibility. It will also be considered Hans Jonas' Principle of Responsibility, thinking that in medicine the *praxis* should be guided with responsibility and prudence, plus those elements mentioned by Thiebaut which will be presented ahead: sensitivity, actions, and feelings, the "right measure" (the middle point), rationality and reflection based on knowledge. His thinking is relevant taking into consideration his background and work; he had thematic attention focused on contemporary moral and political philosophy referring to all those issues affecting Modern Times as narcissism face to responsibility as well as human ethics without a moral system, among other topics that constitute his research lines.

The limits in the progress of medicine and its humane side from a philosophical perspective

As it can be seen, Philosophy and Medicine keep a very close relationship. This is the reason why some ideas about the role of Medicine, contemporary practices, and the human side will be outlined. Contemporary practices have given place to artificial procedures that need to be studied because of their basis settled on mere individual wishes to fulfill: money, power or, recognition. These three are considered by Aristotle (in Cortina, 1999, p. 99, 2.8) as elements that disrupt virtue and instead of prioritizing finding a solution to social and individual's problems are connected to some other changes affecting society.

Virtue, or virtuous behavior, will be used in the sense Thiebaut uses it: as "an analytic of the moral action determined by those ideas of moral sensitivity, moral rationality, the reflective and the learning process" (Thiebaut 2000, p. 438. My translation). This author agrees that these four

elements must be present in the medical *praxis*, in the Aristotelian sense, represented by logical thinking. In it "Those 'ways of being' refer, in the first place, to the actions and feelings of men, and their sensibility, will be defined, secondly, by a middle term, which, thirdly will be exemplified according to a rational principle a prudent man would use." (Thiebaut 2000, p. 440. My translation). His thinking focused on contemporary moral and political philosophy is relevant taken into consideration his vision about subjectivity and community as well as regarding the liberal subject and the community in the sense that the individual is able and free of decision-making about himself. Nevertheless, that individuality implies moral conduct of what is right and wrong, and this dialogue must prevail in a field that could be considered one of the most traditional in its methods to preserving patient's health integrity.

Moreover, the relationship between the mentioned above and the book written by Trías *the Philosophy of the Limit* is based on Cornell's which designates any attempt to spell out how one *determines* a 'right way to behave', behavioral norms which, once determined, can be translated into a system of rules" (Cornell 1992, p. 13). In this sense, the Philosophy of the Limit related to Thiebaut's analytic of moral action, consequently finding a consensus between what should (or should not) be done in aspects regarding human lives, in this case from the medical responsibility with the patient. All theory involved is headed towards a full understatement of which is the real responsibility in this field.

From this perspective, the conception of virtue means the fundamental way in which people choose to act according to their morality. The analytic of actions allows to understand why people carry out one action or another. And even if the purpose of this paper is not that ambitious—it is impossible to create a general principle for all human behavior, especially in a field such as Medicine, where each patient represents a unique case—, it will help to analyze the same train of ideas, to reflect about some actions carried out by physicians in recent years, about new and technological artificial practices taking place in the name of progress.

About society's affectation by the increase of elements disrupting virtuous action, Thiebaut (2000, p. 437. My translation) states:

"[...] the enlightened ethics have substituted the centrality of virtue with the autonomous subjectivity of the individual, and by doing so has swiveled the classic ethics emphasis placed on the socially acknowledged wellbeing practices. This change in emphasis from the community to subjectivity is, perhaps, the central feature of the modern project".

The last phrase shows what has happened in Ethics and leads to thinking about the confusion between the meaning of modernity and progress which prioritize superficial

actions, such as personal practices, directed to meet the needs of the individual, and not always executed ethically. In this sense, superficial and subjective practices prevail over those behaviors which respond to objective and rational principles, directed towards social benefits. In this situation, the *homo faber* tries to exceed the limits of his existence.

Even if the importance of individual autonomy and the relevance it has received during the last decades is recognized, at the same time, it can oppose neither modernity nor progress. On the contrary, based on the idea that an individual is an autonomous being, it is better to consider that reflection and knowledge must always be present to reach—not only the personal but—the common good, especially in the medical practice, since it directly involves another human beings.

The idea of change while preserving the nature of things for the purpose that were created entails questioning if Medicine must continue as it has done for many years, contributing to restoring people's health as its mission, or if it should change its nature by improving new practices with unknown and uncertain results attending to individual wishes. What is the medical *praxis* purpose nowadays? Should Medicine change its name to “health care treatments” to fulfill desires concerning the biological aspects of life, following Mori (2000, p. 731)? He bases his argument on the emergence of Bioethics as “a great cultural movement developed to meet the need of a new moral order for a world becoming capable of controlling biological life” (2000, p. 734), which would justify the change by a need of transformation in Medicine.

It has happened in other disciplines, as in Ethics, for example, responding to the advances in the world and society, but leaving behind the patient as a human being. From our point of view, such a change in direction would transform Medicine into a discipline that uses subjective and superficial practices, concerned only with applying techniques to “fix” things, assisted by technology and losing the richness it has as the art of healing. This would confirm what Thiebaut expressed regarding the change from community to subjectivity. At the same time, it could also be thought that such action misunderstands the idea of scientific progress, which is supported by knowledge. Do instrumental reasons over humanism support artificial practices in the name of Medicine's improvement?

It is controversial to connect progress—which contains a definite meaning—to artificial practices, to justify, in a way, Medicine's advances. These advances must be limited to helping improve the recovery of health or to decrease the numbers in the illness indexes, for example, to cure lung cancer, or AIDS or at least increase healing percentages well as avoiding new diseases as it just has been Covid 19. Nevertheless, talking about the case of lung cancer has not improved as much as one would think in the last thirty years (World Health Organization 2017). Men's deaths of lung

cancer have decreased by 1.9% per year, from 1993 to 2005. Between 2008 and 2012, the percentage decreased by only 3% per year. Another example that shows the improvements in longevity are slow, which has gone from 30 years of age at the beginning of the 20th Century to more than 70 in the threshold of the twenty-first century (Golub 1996, p. 21), as well as the child mortality which has remained at 25%, during the last three decades, according to Golub (1996, p. 46).

As stated before, there are limits in all areas of study, as well as in the actions undertook since it would be impossible to encompass everything. And even if Medicine can be considered as a holistic discipline—from the perspective that humans are a whole—there is only one body to treat, and its functions are clearly set from a biological perspective, and consequently, it has limits too. Following this idea, the authorship selected is philosopher Eugenio Trías, who found out in the late 1980s the cornerstone of his philosophy: the concept of limit. Contrary to Kant, who considered there was nothing such as a limit that could split the phenomenon and the thing-in-itself, Trías' thinking supported that such limit exists (FreeJournal 2020). Limits are everywhere and nowadays, it must be asked if the use of technology to improve the human being is or not one of those limits to face to preserve Medicine as the art of healing.

So, what is the meaning of a limit? Limits have always been presented as a rigid border, this is, as an unshakeable, unbreakable, and impenetrable wall, which is not always the case because some social areas need flexibility. This is why Trías' work is useful because it conceives the limit as a flexible border. How is this possible? He writes: “The limit is always a slippery and double-edged concept, sometimes of an irritating ambiguity (although it is always stimulating). The limit is always an invitation, to be trespassed, transgressed, or revoked. But the limit is also an incitement to improvement, to excess” (Trías 2003, p. 17. My translation). This assumption could justify the new practices taking place in Medicine today, for example, actions such as extending the life of a patient in a process where his condition makes death an unavoidable result. And despite this physicians intervene to preserve his physical life, even if a human being is—in Trías' conception—“one who creates his own identity and is free and responsible in his decision making” (Trías 2003, p. 36). Kottow thinks the same: there no longer is an agent of processes (2009, p. 5), it respects its “organic” function while ignoring the human aspect.

Following Monod's understanding of artificial procedure (1971) refers to one which exceeds needs and requires planning; this means that it is not objective like Nature is (Monod 1971, p. 17). At the same time, this kind of action faces invariance, which means that the same characteristic information in the structure of species would always be the image of the first one, to teleonomy, a concept relying on the personal idea that implies to carry out a project (Monod

1971, p. 26). This is an external intervention on a natural process undertaken by an agent.

A need is when all the necessary actions must be taken to help a body recover its normal functions; a demand is a procedure that implements actions to satisfy the wishes of a person, surpassing, in some cases, the border established by the body. In this sense, Trías also recognized a rigid limit when he mentioned that even if we live in a world, outside of our existence, we constitute a limit between that ‘living world’ we live in and what goes beyond this world; a frame of the mystery that transcends us and determines our mortal condition (Trías 2003, p. 11). He did not say it explicitly, but his idea implies the body. For this work, limits will be established in the body’s natural functions and, in consequence, the extent to which the Philosophy of the Limit will intervene consists in its capacity to respond to medical treatment and recover its health when it is fragile or has been lost. This also determines the capacity of what individuals can do, considering its human condition.

To exceed the limit in Medicine could have two meanings, a positive one: It could be understood in the sense of improving the medical *praxis*, defying nature; or a negative one since it could be interpreted as a medical excess that goes against the natural conditions which cannot be avoided but only delayed—such as death—, giving place to inhumane situations.

There also are some cases in which Medicine responds only to the wishes of individuals, for example, the case of conceiving a baby, even if the doctors know that statistics show that “there is only a 20% chance of success in such cases, and at the most, only 40% of those will carry to term in some countries” (Ayala 2015, p. 7. My translation). There also exists reproductive donations and even perfective genetic procedures, building up one’s hopes under uncertain circumstances. Some other questions arise because of these situations: Should medical procedures depend on people’s financial capacity? Should the economic status define what medicine does for a patient? Is it acceptable that some medical procedures are carried out only because the patient has the financial power to afford them? In response to utilitarianism and considering the results of previous examples, should the patient’s wishes be rejected based on morality, values, and knowledge?

According to Trías, even if these conducts would represent the “shadow” of the individual (in the sense of representing conducts which are not expected because they do not respond to a rational and moral behavior), he would conceive them as “normal” since he accepts that the human being coexists in a “hidden world”, a “dark one”, where what constantly emerges is not its morality but its passions and feelings, creating a tension between them and the “clear world” —the visible world—where actions represent what their duty is according to rational thinking, thus allowing

a moral behavior. This means that human beings find their “living world” in a “fuzzy zone”; the “border space”. In that sense, the Limit for Trías’ has two opposite meanings: a positive one in the sense of evolution, and a negative one in the sense of transgression, and with this idea, he tries to explain what is comprehended as a human being, and allows to understand “‘that’, which we are” (2003, p. 11). However, it is undeniable that progress is, in a certain way, a kind of transgression.

He defines a human being as a “border condition” in the sense that “we are at an infinite distance from nature (pre-human) as well as from the mystery (super-human)” (Trías 2003, p. 12), with an ample range of behaviors. Humans oscillate between actions representing the expected conduct for a rational and moral human being in present time, and those that reflect their negative side—instinctively immoral and/or inhumane actions—with consequences for the community; in this case, money, pleasure, power, and/or the need for recognition disrupt such equilibrium.

In that sense, for Trías, the Philosophy of The Limit is expressed as space where the “bordering reason” takes place, generating tension in actions performed in between the “visible world” and the “hidden world”. This refers to a critical thought that maintains the dialogue open between rationality—what the individual can deal with in that zone—and its shadows, all those areas that refer to the senses and faith, for example, religion. It has to be considered an obliged dialogue in Medicine, to confront artificial practices—such as genetic modification—which oppose dogmatic reasoning that respects natural changes, and that tries not to disturb the natural processes of life through instrumental technologies, as well as the overconfidence in the improvements of the medical science, motivated by possibilities such as material gain or the recognition of the medical community, but not under necessarily rational and/or moral practices.

Following Trías’ proposal, those kinds of procedures are the “individual’s shadows”, thus, they would be situated on the “dark side”, giving place to a real dilution of reason, trying even to surpass the limit of the human body and its nature, the advances in research and the faculties of the physician, as well as the patient’s. In this case, Maimonides’ Prayer for physicians, where he makes them remember that a Doctor is not God (Ayala 2006, p. XXV), is completely forgotten, in response to “modern social values” as material aims, and/or individual’s illusions. As Trías says, we make sense and create meanings based on our passions, emotions, and linguistic uses, but at the same time, they constitute limits in the world we inhabit (Trías 2003, p. 11).

The limit also establishes our relationships with the world. This is why it is considered that the Limit per se in Medicine could lead to thinking about the contemporary medical *praxis* which exceeds its nature and *raison d’être*,—to help people recover their health—and not to practice

heroic acts or test any possibility that goes beyond human capacities—the patient's body and the physicians' values and knowledge—because to carry out extreme practices is to play the game of making a human industry, in the sense of determining human life's evolution and even its creation, a situation that borders on going beyond the dignity of the individual. By dignity, it is understood the recognition of the value of life, as well as the value of "the other" in his human quality; an element that establishes, in a certain way, the frontier of the human being. This means that if physicians recognized said dignity, they would act to preserve it, responsibly following their values even if it goes against their financial gain.

In the next section, it will be discussed the physicians' responsibility as a virtuous *praxis* represented by moral conduct seeking the benefit for the patients and the community.

Responsibility and the medical practice

As mentioned previously, following Trías, all actions that an individual can pursue, fluctuate between a "real world" which demands moral actions—because it is part of a community as well as an individual—, and a "dark world", the "hidden one", as he calls it, where every action can take place with a seeming private gain. Can this type of practice in a discipline in which the human being is at the center of its *praxis* be allowed? It seems that the earlier discussion does not apply, or must not apply for the medical *praxis*, where "the other" is the element determining its existence and its mission, with a very well limited frame: the human body and its functions.

Nevertheless, the intention here is not to establish nor impose a certain behavior into rights or wrongs, but only to present a humble reflection about how the medical *praxis* should be, nor to compare this position to others, but rather to provide useful tools and retake ideas and thinkers that should be considered in this *praxis* and that are not related to Medicine. Being said that, mainstream literature related to philosophy and ethics of medicine has issued one point of view, but seeing it from different perspectives, like the one imparted in this paper, can help in different—positive—senses. Considering this, the discipline can preserve Medicine's humane quality, despite the existence of the "dark world"—the passionate, irrational and sentimental side—which is always present in human beings, and to this end the Philosophy of the limit is useful.

Even if it can be considered that Medicine should be understood from an individual perspective, under the assumption that each patient's case is different and its mistakes or excesses impact the patient in a first reach (when the results are not favorable) it has also consequenced in a larger scale in the city, the State or the world. Simultaneously as

these pages are being written, let's go back to the "extra-human" nature evoked by Jonas and the recent practices in genetic or "perfective" modification, as well as in assisted reproduction, disrupting invariance and giving priority to teleonomy; a practice that can be dangerous in the wrong hands, affecting humanity—as well as its nature—and the common good, as De Siqueira explains (2009; 3(2):175).

In this sense, human beings should be responsible for themselves as well as for the whole of humanity, considering Jonas' idea regarding responsibility in his Principle, and reinforced by Ricoeur (in De Siqueira 2009; 3(2): 175) when he writes "it is responsible, it feels affectively responsible the one who is in charge of keeping something perishable (...)". At the same time, Jonas establishes the Principle of responsibility as "preserving the permanent ambiguity of man's freedom that any change of circumstances could never abolish, to preserve his world's integrity as well as his essence, in the face of abuses of power" (1995, p. 17). Under these perspectives, it cannot be said that the life of humans could be conceived out of those boundaries: It is something perishable and something to be preserved in terms of integrity. Integrity of life is understood as keeping all the natural functions of the patient; to make the individual owner of his/her decisions and free to decide about the actions that he/she wishes to carry out. This means to be an agent of his decision-making, or in other words, to exercise "the right to self-determination" (Steinbauer 2017).

Another issue to approach is the abuse of power, understood as all those practices conceived as "projects". Projects based on technology that disrupt the natural course of life, without any certitude in their results and/or challenging human nature through medical *praxis*, even knowing that those procedures would not be as fruitful as the patient hopes, but with an individual gain for the physician. Even if it cannot be established that all these conducts are inhumane because they have been approved by the patient, in most cases, the patient ignores the consequences of the procedure, always hoping that his desires would be satisfied. In those cases, the responsibility of undertaking or not a medical procedure in uncertain circumstances, regarding a patient's wishes should fall on the physician. It should be considered that the decision of each individual (the physician's in this case) finds its limits in personal values and collective behavior. The capacity of free decision-making also defines our liberty, liberty to choose "that" what is humane or "that" what it is inhumane, in terms of Trías (2003 p. 17).

Thus, what is happening today which makes it familiar to find such artificial practices, as the ones mentioned above? Does this mean a change of mind and perspective within the Medical field? Or does it respond only to the demands of individuals? Is this the future of the discipline due to progress? What is the place of the patient in those practices? Does a physician's decision about carrying out or not

carrying out an artificial practice is based on financial profit and the patients' economic possibility to pay for it?

There is not yet a real change in the way the Medical practice thinks and it should not be thus since its nature does not change and its practice remains directed at human beings. It is our sentiment that the problem emerges due to the confusion between the evolution of Medicine which belongs to rational improved and scientific knowledge, settled on ideas concerning each area and based on responsible behavior, facing seductive practices very distant from values and primarily based on emotions, more than in deliberate acts. This action is confronted by experience and is apart from the humane side and responsibility. A responsibility that is implicit in the medical practice, but that is not always explicit. This behavior that takes place in the "border space" makes borders flexible and even dilutes them.

Comparing the progress of medicine with an unconscious practice, it can be seen that medical thinking shows an evolution and that all of its actions are based on theoretical knowledge, confronted to those individual cases which should be axiologically controlled. Medicine is The Discipline in which values must be present in every case and procedure, even if it is difficult to remain at the threshold between the rational and the "hidden world". On the one hand, to exceed what is possibly human, helped by technological advances, does not make Medicine or the medical practice a better and improved field. On the contrary, it disrupts its human side and makes it risky for the patient and the physician himself. In this sense, technology and contemporary improvements must help Medicine to be an area with better results in restoring the patient's health, but not a field-oriented for profit, or to accomplish individual's dreams, or look for impossible promises to accomplish (Golub 1996, p. 20).

On the other hand, if the physician is only about his gain and the patient's capacity to pay for any artificial procedure he wishes, the nature of the patient changes from what it was initially conceived in Medicine's origins. The patient becomes a client and stops being someone who needs medical help. In this sense, the physician's position changes radically, from being someone who provides a cure and care to selling a service, because he does not consider any more his responsibility on what can and must be done by someone in his position. In this sense, it is not being said that health cannot be considered as a service, it is one, but it is also a right, and in consequence, it should not be lucrative, and only utilitarian, as a private enterprise.

This is why, as Monod said, in such many cases, "Science impinges against values even if not on purpose" (1971, p. 187), following personal wishes. Intending to avoid these practices, a new border emerges between theory and practice, the first one formed of knowledge in combination with values. This is what it will be considered a rational and responsible practice, a virtuous one as the result based on

the knowledge of what must be done and is possible to do, also based on an axiological system, leading to responsible humane actions due to the awareness of the human and scientific limits, which also represents the respect for these three elements: knowledge, values and the human being.

In that sense, artificial practices refer to those regarding the recent medical practices for conception, and those used to modify the genetic code: When there is a human intervention to alter natural processes and the human condition, which depend on our capacity to make up our minds freely (Trías 2003, p. 17). This is why it has been said that each person's responsibility is the element guiding the decision-making process. Nevertheless, alongside Jonas' thinking, it is not considered to be the unique attribute that influences it. Concurring with Trías' and Thiebaut that consciousness and conscience constitute the limits of the "border reason", there is an agreement by considering them as elements that can provide the information about what human beings are capable of doing, allowed or not, of moving between those two worlds, but partially. We agree with these authors in considering awareness a guiding element, but at the same time, we differ in seeing it as a unique condition. An addition would be what should be the limit of the "border space" and that should be a guide of all actions in the threshold, where *praxis* takes place, is to be aware of the responsibility we owe and to act in good conscience. This means to carry out prudent actions, as Aristotle, invoked by Thiebaut, established while referring to the "active attitude" (behavior) of the moral subject. In this sense, a link can be found between Thiebaut and Jonas' concept of responsibility. According to Jonas' imperative, humans need to act so that the effects of their actions are compatible with the permanence of genuine human lives (Stamm 2019), as actions brought about a singular point in space and time may have far-reaching or global consequences that might be irreversible, consciousness is an important part of the responsibility. Only then it would be possible to point out a natural feeling of responsibility, (Berdinesen 2017).

In consequence, it is considered that the quality of being aware of this responsibility allows people—and physicians in this case—to act taking the human side into account. Therefore, combined both understandings, these provide particular achievements about medical responsibility and introduce the importance of consequences, considering these are people's lives at stake. This does not compel to act in an inhumane way, as it would be an excess of responsibility trying to avoid the inevitable and lacking prudence, leaving awareness aside. Conscience, as a unique condition, could also derive into more than prudence and it could prevent someone from taking action because of the fear of the consequences. The Aristotelian concept as the middle point would be in this case their combination, resulting in being aware of the responsibility of the prudent man.

In Medicine, to be prudent when facing every possible action and to be aware of the medical responsibility means to consider the person being treated. It represents the guiding element that prevents that line between using technology and technical advances to help improve a patient's health and using them to comply with the desire of people which could be detrimental to their bodies and their finances. Being aware of that responsibility, combined with prudence, helps preserve the duty of Medicine, and not to forget the natural and vital process of the patient. Being aware of that responsibility allows what is needed to restore health and avoid putting the patient's health at risk, which is considered the goal of the medical *praxis*. The art of curing considers patients from a holistic perspective, which means that the illness does not exist apart from the patient. This implies treating the disease but also the person. As Maimonides said: "The doctor must not hurry to treat the illness, he must treat the patient who suffers it" (Kraemer 2010, p. 457). To forget the patient and to focus only on the illness makes Medicine lose its human side. This also means respecting the limits of Medicine, as well as the human being's.

Last considerations

Considering this, the achievements of this paper are directly linked to the accomplishment of the objectives established at the beginning. The objectives were focused on current and new practices, nonetheless, the analytical contribution consisted of discovering and presenting a dialogue between ethics, and ethics regarding human lives, joining past and present to find a consensus towards the future. In doing so, moral dilemmas, as well as virtue, combine through this reasoning.

It is difficult to talk about Medicine and its *praxis* keeping the human attitude in a world where technology and even medical improvements are common. Progress can be easily confused with the use of technological and technical improvements instead of an exercise based on new knowledge and values. Technology helps to cure people, but it does not replace the soul of Medicine: The art of healing. Progress and improvement in this area are to act having values in mind and based on reflecting on the knowledge derived from basic and clinical research focused on genetic, molecular, or cellular functions.

Both kinds of research allows to go further in knowledge and to improve results to help find a cure or treatment which will restore health, in cases that the need is real, for example, AIDS, Alzheimer, cancer, neurological or muscular dystrophies, just to mention a few. But these practices are in a "border space", doing what they can without turning it into a business or creating false expectations.

The "border space" is where there is a possibility of action and according to the opportunities for financial gain, pleasure, and personal wishes, there is always the appeal of going over the limit. However, Medicine must not follow the "hidden world" or make choices based on the financial capacity of the patient. It must not lose its essence, its original mission: Protecting the health of the patient and restoring it when it is lost.

The results, values, and knowledge from before must prevail over any sort of appeal and other subjective considerations and demands which do not justify a procedure. It must always consider what is natural and the patient's vital processes, because that is the human being the doctor works for. Progress and improvement do not mean to apply technology to accomplish individual projects affecting invariance in the name of teleonomy, as it can happen in artificial practices as genetic modification, perfective codes processes, or assisted reproduction. Artificial practices do not necessarily mean progress; they might even affect the life of the person and the whole of humanity.

According to Thiebaut, Medicine cannot allow itself to recognize modernity if it changes its priority from the community to subjectivity. Not all changes are always positive even if they seem to be an improvement to their field. Even if the consideration of the community in the medical sphere and the moral community are not directly approached in this paper, they are present in the subject treated. Nevertheless, they represent one of the reasons why Medicine must not allow to consider itself as "care services". Medicine possesses what no other social science does: The faculty to preserve the integrity of human life, keeping its natural processes and needs functioning. In the present analysis, Medicine cannot allow itself to be in between what people want and must do. It is not a field in which people can understand the reasons for acting in a specific manner, obeying the previously mentioned disruptions instead of staying true to previous results and the knowledge developed in that area.

Medicine was not created to respond to individual demands in terms of wishes and pleasure or to play hazardously to satisfy people's expectations under an apparent "control" of circumstances, because the individual body does not always respond in the same way, and not everybody responds alike in every case. Each body is different, and it reacts differently. This is why they must apply their knowledge knowing the benefits and consequences that their actions entail in any process, even if it does not respond to the wishes of the patient. They must behave virtuously, reflect, always have the patients' best interest in mind when a practical judgment in any circumstance must determine their actions, instead of acting for a private benefit. This relates to the idea that illness must not and cannot be separated from the patient as a suffering human being. In Medicine, there

should not be a gap between virtue and the state of things as they should be.

A virtuous action would lead to choosing from those statements applying in each particular circumstance and to keep aside those that can interfere more than they can help. Thus, the decision-making process has to choose these alternatives which are directed towards preserving the patient's human condition. The natural processes remain dependent on multiple alternative options occupying the second plane while the expectation of efficient or effective decision-making occupies the first one. In this sense, all the natural processes as death, birth, or aging become subordinates to a human decision; they depend on the possibilities of the *homo faber* who intends to control his evolution, as expressed by Jonas.

For this, fear and self-confidence must appear at the extremes of a range of actions, allowing multiple possibilities without falling into heroic acts or negligent conduct.

Being responsible and conscious of our actions could allow to find the middle point suggested by Aristotle and would allow the medical *praxis* to keep its human quality and its exclusive art: The healing of the human body, as well as to be coherent with the Hippocrates' statement "whenever a doctor cannot do good, he must be kept from harming" (in Belofsky 2013).

References

- Adamson, P. 2016. *The Best Doctor is Also a Philosopher*. https://philosophynow.org/issues/114/The_Best_Doctor_is_Also_a_Philosopher. Accessed 6 Jan 2022.
- Ayala, A. 2006. *Medicina de la Reproducción Humana*. México: Editorial ETM, 2ª ed.
- Ayala, A. and Ayala, R. 2015. *¿Por qué no puedo embarazarme?* México: editorial Mujeres Independientes en Acción, A.C.
- Belofsky, N. 2013. *Strange Medicine: A shocking History of Real Medicine Practices through the Ages*. New York, NY: Penguin Publishing Group.
- Berdinesen, H. 2017. On hans jonas' "The imperative of responsibility". <https://philosophia-bg.com/archive/philosophia-17-2017/on-hans-jonas-the-imperative-of-responsibility/>. Accessed 26 Oct 2021
- Brain, P. 1977. Galen on the ideal of the physician. *S. a. Med J* 52 (23): 936–938.
- Cornell, D. 1992. *The Philosophy of the Limit*. England: Routledge.
- Cortina, A. 1999. Ética de la Empresa Informativa. In *Cuadernos del CAC*. N°. 6, II, pp. 2–8. Pdf.
- De Siqueira, J. 2009. El principio responsabilidad de Hans Jonas. In *Revista BioEthikos*. 3(2): 171–193. <http://www.saocamillo-sp.br/pdf/bioethikos/71/171-193.pdf>. Accessed 9 March 2017
- FreeJournal. 2020. Eugenio Trias Sagnier. <https://amp.freejournal.info/29928814/1/eugenio-trias-sagnier.html>. Accessed 26 Oct 2021.
- Golub, E. 1996. *Los límites de la Medicina*. Santiago de Chile: Editorial Andrés Bello.
- Hans, J. 1995. *El Principio de Responsabilidad*. Barcelona: editorial Herder.
- Herder Editorial. (n.d). Carlos Thiebaut. <https://www.herdereditorial.com/contributor/carlos-thiebaut>. Accessed 31 Oct 2021.
- Kottow, M. 2009. *La simbiosis entre Medicina y Filosofía*. http://www.medicinayhumanidades.cl/ediciones/n12009/06_Ciencia%20y%20medicina.pdf. Accessed 2 Aug 2016.
- Kraemer, J. 2010. *Maimónides, vida y enseñanzas del gran filósofo judío*. Barcelona: Kairós.
- Monod, J. 1971. *Le hasard et la nécessité*. Paris: Le Seuil.
- Mori, M. 2000. 'The twilight of "Medicine" and the dawn of "health care"'. In *Reflections on Bioethics at the turn of the Millennium, Journal of Medicine and Philosophy*, 25(6): 723–744. file:///C:/Users/L01131490/Documents/2016/Recherches%20multiples/MedicinayHumanidadesIIES/twilightof%20medicine%20and%20the%20down%20of%20healthcare.pdf. Accessed 15 July 2017.
- Rosen, R. 2015. 'The best doctor is also a philosopher: Galen on Science, Humanities and the Arts'. The University of Pennsylvania. <https://vimeo.com/126153171>. Accessed 17 Aug 2016.
- Stamm, A. 2019. Forty years after the "Imperative of Responsibility" ethics of technology choice in times of eroding planetary boundaries. <https://www.die-gdi.de/veranstaltungen/details/the-imperative-of-responsibility-understanding-hans-jonas/>. Accessed 26 Oct 2021.
- Steinbauer, A. 2017. 'The right to die'. In the news section. https://philosophynow.org/issues/119/News_April_May_2017. Accessed 20 April 2017.
- Thiebaut, C. 2000. 'Virtud'. In A.Cortina *Diez palabras clave en Ética*. pp. 427–461. S.L: Editorial Verbo Divino.
- Thiebaut, C. 2001. 'El sujeto postmoderno. Una reivindicación del sujeto moral tras su descarte en el siglo XX'. Areté, *Revista de Filosofía*. (2001), Vol. XIII. N° 2, (pp. 91–111). <https://dialnet.unirioja.es>. Accessed 7 Nov 2021.
- Trias, E. 2003. *Ética y condición humana*. Barcelona: Ediciones Península.
- World Health Organization 'Cancer'. <http://www.who.int/mediacentre/factsheets/fs297/es/>. Accessed 29 March 2017.

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.