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Ethics in times of COVID-19

Ética en tiempos de COVID-19

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Abstract:

The main ethical issues in the management and safety of public health care are: distributive justice and non-abandonment. The COVID-19 pandemic raises difficult ethical questions for our health care system. Perhaps the most difficult is how to equally distribute scarce resources, and determine who lives and who dies.

Keywords:

COVID 19, public health ethics, pandemic response, diagnostic tests, economy

Resumen:

Los problemas éticos más destacados de la administración y seguridad de la salud pública son: justicia distributiva y el no abandono. La pandemia COVID-19 plantea preguntas éticas difíciles para nuestro sistema de salud. Quizás lo más difícil es cómo saber distribuir equitativamente los escasos recursos, y determinar de quién vive y quien muere.

Palabras Clave:

COVID 19, ética salud pública, pandemia, pruebas diagnósticas, economía

INTRODUCTION

"The evil that is in the world, almost always comes from ignorance, and good intentions may do as much harm as malevolence, if they lack understanding"

The Plague Albert Camus

Today, Covid-19 pandemic has generated several problems in the health, economic and social sectors, and the ethical issue is not behind it both global and national levels. Among the ethical problems that have emerged from Covid-19, there is the process of identifying and selecting the best candidates for intensive care, and even selecting the candidates for mechanic pulmonary ventilation. Such ethical problems generate problems of discrimination. Due to the lack of supplies, the services are rationalized according to the variables that are analyzed for such selection. The healthy life years, the life

expectancy, and the chances of surviving the disease, are considered. This selection is a medical excuse for a practical use of the resources during this pandemic, generating itself an ethical debate since, from the patient's perspective, it is unfair and immoral.

Both parties must have a high sense of responsibility, of commitment and a strong rationality for decision making in order to control de epidemic in the country, and on the other hand, attend the patients to accomplish their ethical medical responsibility.

At the Hastings Center, it was created an ethical framework for a pandemic, focusing on 4 levels: the knowledge, the duty of planning, the duty of preserving, and the duty of guiding. Also, the American College of Surgeons suggested defense, transparency and commitment in supporting everyone who results directly or indirectly affected. It is important to know that our country has a serious capacity problem in the health care sector, regarding human resources to attend the pandemic.

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Few days ago, The Ministry of Health, estimated that there could be 10,528 seriously ill patients associated to COVID-19 who could require intensive care. The whole country's capacity is 4,291 intensive care beds and there were only 2053 ventilators in service. Also, it has been informed to the Mexican society that nearly 400 hospital beds are going to be prepared to attend serious cases, only in Mexico City.

Mexico has been pointed by the Organization for Economic Co-operation and Development (OECD), as a country with deficiencies in its health care system, due to the deficit of hospital beds and nurses per a thousand inhabitants. According to this organization's recommendations, there must be 4.7 hospital beds every 1000 inhabitants. In Mexico we barely have 1.5 camas per thousand inhabitants. Also, it is recommended to have 3.4 physicians per a thousand inhabitants; in our country the number is 2.4. Regarding the nursing personnel, it is recommended to have 9 nurses while in Mexico we only have 2.8 compared to the numbers mentioned by that organization (17). According to the information from the Ministry of Health, a concerning topic is about the human resources there are to face this pandemic. At a national level there are 37,956 general physicians, 112 thousand nurses, 1284 emergency physicians, 207 pneumologists, 174 infectologists, and 440 epidemiologists.

In spite all these numbers, the country will have to adjust in many ways to face this epidemic. There have already been government actions like the purchase of medical supplies from China, getting into our country, until this moment, in 9 flights coordinated by the Ministry of Foreign Affairs; also, there has the been the purchase of ventilators, and the private clinical and hospital alliances to increase the capacity of attention. It is important to know that at certain points of the pandemic there is going to be saturation, scarcity and needs, and that is when decisions that might affect, not only the advance of the pandemic but also the patient's attention, must be made. Therefore, ethics will have a vital role in the development and execution of the plans and protocols and it is important that everyone involved knows them in order to get optimal results.

TESTS AND SUPPLIES. HOW AND TO WHOM THEY SHOULD BE DISTRIBUTED?

The health topic must be incorporated to the studies about politics and international relations as it is a component of international relations, of the formation of supranational organizations and it favors the implementation of development strategies. Not only because the health sector is crucial for social investment, but also because among the social determinants in health, there must be the political instability, the terrorist menace, the control of illegal drugs on behalf of regulatory organisms at the borders, and general interaction between nations. Natural and economic disasters have an impact on the welfare of citizens all around the world. It can be said that their consequences get global as fast as the market

fluctuations or the changes of political regimes. At the same time, the general state of satisfaction and good life quality of the communities influence their productivity, their acceptance of rejection toward public policies and their implementation in the global community.

Efforts around global health are frequently studied under the concept of international health, recognizing that, in the current state of world politics, countries and nations still have the starring role. The low participation of civil society can be explained due to the low representation of their leaders and the absence of proper communication channels, even in democratic states. The notion of health as a right granted by the State, with the market participation to some extent, turns the demand of services into an unlimited source of frustration and concern, since all the health care demands, like education and well-being, are infinite and increase at an accelerated rhythm that forces to use technical innovations.

The equal distribution of resources, the permanent interest in progressively decreasing inequality, and promoting health development and maintenance, among other aspects, have motivated the analysis of health care systems from an ethical perspective. This analysis has been relevant to the speed at which the health care systems are changing in the world and due to the effects that the reforms have caused. However, they have been developed within restricted epistemological assumptions that have limited the area of decisions about the most urgent health problems.

The PCR tests have become the most requested medical supply due to the coronavirus pandemic. However, these tests would not be useful without the reagents to process the samples. Today, America is the continent with the largest amount of contagions by Covid-19 in the world. Europe and Asia are in more advanced phases of the pandemic, and they have overcome, to a large extent, the contagion peak. Although, virus arrived late to the continent, the data from China, Italy and Spain were not enough for other countries to be better prepared to combat it.

The first contagions of this new disease challenged the governments. The samples of possible sick people must be sent to the CDC of Atlanta, U.S.A and wait in a long line to confirm or discard the cases. Besides, the relatively late arrival of coronavirus has placed the continent, particularly Latin America, at the end of the waiting line for medical supplies. The majority of reagents, kits of detection, gloves, and face masks arrive first in countries where the contagion phases are more advanced, like the European countries, which is the current epicenter of the pandemic. Brazil, Colombia, Peru and Ecuador have announced that they have not been able to process all the tests due to the lack of reagents. Santiago Guerrero, researcher of the Universidad UTE, says that the reagents are the basis to determine the number of contagions in each country.

At the beginning of March, the people responsible for decision-making and the management of the COVID-19

sanitary crisis in our country had a dilemma about using the tests massively. Definitely, our country did not have, nor have, the sufficient supplies for tests to attend the number of possible sick people. On the one hand, the press and some sectors of society insisted that massive tests should have made, and buy or request those supplies to do the tests according to the advance of the pandemic in our country. The hospitals and clinics were not ready to attend the request of tests of all the people who had symptoms. This is when ethical decisions started to be made, deciding who was going to receive the test or be sent to their home and rest.

According to the Organization for Economic Co-operation and Development (OECD), Mexico is in the last place within the 36 countries regarding the application of the tests to identify coronavirus. Mexico applies 0.4 tests per 1000 inhabitants, while the mean of the countries that are members of that organization is 22 per 1000 inhabitants. The leader in this regard is Iceland where an average of 134 tests are applied per 1000 inhabitants.

Although, one of the problems to apply the massive tests in our country is their high cost, according to the general director of epidemiology of the Ministry of Health in Mexico, José Luis Alomía Zegarra, from January 2 to May 14, a total of 128, 253 COVID tests were applied in our country. These tests were performed by the hospitals of the health care sector of the 32 states, national health care institutes, ISSSTE hospitals, Social Security and specialties, as well as the Institute of Epidemiological Diagnosis and Reference, (INDRE). Also, some private hospitals, clinics and laboratories have applied tests to detect COVID, which have a cost ranging from \$3500 to \$5000; a very high cost that is not easy to cover by the people nor by the health care sector to attend everyone who is interested (16). In the last weeks, there has been a lot of criticism to the government's public policy of not granting enough tests in the health care sector. In the hospitals, the ones who decide who to apply the COVID tests to are the medical staff designated in the TRIAGE. They use a questionnaire made by the WHO and based on the results, they decide whether to apply the test or not. The hospitals must prioritize them to the patients who present the most serious symptoms or with hospitalization criteria, leaving the health care personnel and the patients themselves with very few freedom to decide. Due to the ethical controversy derived from this decision, the media, the sick people, the health care staff, and the general society have pressured the federal government to change this public policy. The Associate Secretary of Health, Mr. Hugo López Gatell, stated that it was not necessary to apply more tests than those needed. Quoting his statement: "There is a public expectation that it seems to be created by comparing the amount of tests applied in other countries, trying to relate them with the efficiency of the interventions. This makes no technical nor scientific sense", said López-Gatell in a press conference.

Today, our country is going through the peak of the pandemic that has affected the whole world. As the cases and the problems of the health care centers in the country increase, the health care authorities have been adjusting the strategy to face this crisis. One of the first actions was to buy more tests and ask for supplies to other countries so we were not as vulnerable during the attention to the people with COVID 19 symptoms, and be able to apply the tests to the majority of the affected people. Today, there are more than 100,000 tests available in the whole country and about 300,000 more tests have just been purchased which will be available in the following days, however there is still plenty to do (16).

ETHICAL VARIABLES: HEALTH AND ECONOMY

The global economic and financial crisis concerns common ethical values and standards. The laws require a morality and the global laws demand shared ethics. The demands stated in the United Nations World Pact and the guidelines from OECD require intercultural ethical values. This does not require a specific ethical system, but simply some common values and norms. The Manifesto for a Global Economic Ethic is based in four such values, shared by the major world religions: commitments to non-violence and reverence for life; to fairness and a just economic order; to truthfulness and tolerance; and to partnership and equal rights for men and women.

Each day, there are more people who are aware that the global economic and financial crisis is also about common ethical values and standards. One might argue: do we not have laws which just need to be enforced? Sure, solutions to this crisis require all the provisions of the law. But laws are not enough. Everyone knows that, the political will to fight greed, fraud, corruption and self-aggrandizement is often weak because it is not supported by an ethical will. Laws without morality cannot endure, and no legal provision can be implemented without moral consciousness based on some elementary ethical standards. But is this not just an issue of individual morality? Not at all, it is also an issue of corporate morality and concerns the global market economy as a whole.

Recent experiences have proved that the sustainability of the market economy is by no means guaranteed. In fact, one cannot escape the fact that the emergence of global capitalism has brought with it an entirely new set of risks. Trying to find a single reason for, or solution to, the challenges of the global market economy in a particular country or in a particular region is unlikely to be successful. In fact, what it is often observed is that, in such a situation, mutual recriminations occur: economists accuse politicians and politicians accuse economists, while the average citizen frequently sees the moral defects of both protagonists. In any case, if only one of the three elements, whether it be economists, politics, or morality, does not work, it can cause serious difficulties for the market economy.

Because of this, health is today, object of scientific, administrative, philosophical, and political interests, and the decisions that everyday are made regarding health involve different sectors and actors. The health care professionals, users, insurers, as well as policies' creators, forced by the health emergent needs of the society, permanently make decisions trying to distribute, in the best way possible, the resources that are available, in such a way that they benefit the general population as well as each individual.

Analyzing the situation, our country faces one of the biggest challenges of its history and honestly, winning the fight against COVID-19 will be very difficult until there is a vaccine, a greater capacity of attention or an efficient treatment. That is why, the objective of every government and the secretary of health will be to minimize the losses, both human and economic. There is the ethical dilemma in the public health issue, who and how will be attended, and regarding the economic issue, who will be protected and how the economy will be reactivated, mainly in our country where the economy is vulnerable and highly informal. At a global level, several specialists have searched for different measures for the majority's welfare and a more efficient use of the few supplies and resources there are. These measures made evident the inequalities and deficiencies in our country. Mexico is in a difficult situation due to two ethical dilemmas that are analyzed below.

On the one hand, deficiencies in the health care system like the diagnosis tests, intensive care beds and ventilation equipment, as well as supplies for the protection of the health care staff. The allocation of scarce resources during the pandemic is based on 2 categories: finite and infinite resources. The utility reasoning focuses those decisions to guarantee the optimal conditions for the receptor's survival. Regarding the infinite resources like the ventilator, it can be assigned to a patient, and then taking it back depending on the demand. The University of Washington and the University of Pittsburgh, have developed models to assign scores to patients, depending on their age and comorbidities. In critical patients with a high probability of imminent death, CPR must be offered only if there is going to be a clinical benefit and only if the health care personnel has appropriate protection equipment, and finally, it must be considered the allocation of resources, if it is not beneficial it must be immediately informed to the patient and the relative responsible for him/her. On the other hand, there is the economic issue. In our country, it has been implemented a public policy of home confinement and the shutdown of nonessential economic activities since March 23; however, in our country, more than 50% of the economy is informal and most of the rest are jobs in small and medium enterprises. It is a country where the condition of poverty persists and where the majority of the population live day by day in a context of high labor informality.

Both ethical dilemmas have placed the population in a conflict of individual decisions. On the one hand, people assumes their responsibility of not getting sick and avoid contagion, but on the other hand, they need to generate income to survive. This situation showed the great inequality there is in Mexico, where the choices are not the same for everyone, and therefore, the obligations should not be the same. During the advance of the pandemic and how countries like China and European countries control it, there is going to be an ethical and moral fight all over the world, where the medical advances for the cure and a possible vaccine will be highlighted, the most developed countries will have starring roles. Countries like China, France and Israel, have significant advances in the development of such vaccines. They have declared that once they get the vaccine, they will share the formula and will sell it to the rest of the world. However, countries like the United States, United Kingdom and Japan, have not defined their situation yet. It will be interesting to see, when the moment arrives, the ethical, political, economic and medical issues that will be presented. There is no doubt that ethics will be the value that will prevail in the decisions during the pandemic helping to overcome this scenario that has been terrible for Mexico and the world.

CONCLUSION

From the very first days of the pandemic, there have been many theories, causes and speculations about the treatment, follow up and control of the pandemic, in many cases exaggerating the information about the new coronavirus. There is a general trend of listening almost everything the media and social networks say, without realizing that the unconscious tends to take for good the most unexpected, absurd and incredible news. In this pandemic, there have been a lot of fake news. During the first days, there were theories about the origin of the virus, that it was created in a laboratory, that it was dangerously similar to HIV virus, and the desire of disappearing the human kind, responding to the interests of a government.

It has even been compared to the 1918 flu, in which it is estimated that between 20 to 40 million people died all over the world. The epidemiological projection are also easy targets for exaggeration. Some initial estimations were that the pandemic could affect 40-70% of the world's population, a number that some media are still using weeks after, in spite of knowing that the level of contagion is at a lower range.

Maybe the most popular news are about the comparisons and reports between the number of sick people and death people in different countries. However, regardless of their objective, these comparisons are submitted to important biases. The number of infected people that is informed, depends on the availability of diagnosis tests and their use in each country.

Currently, there are no solid evidence about the efficiency of the drugs that are being used in an experimental way to treat the most serious patients with COVID-19. Sometimes, there are only *in vitro* studies, and the majority of times, the only evidence comes from a small series of clinical cases, without control group, or from controlled studies with an insufficient sample size. Even though there are many RCTs going, in this moment, the treatment guides consider that there is no enough evidence to use non of these drugs on serious patients. Nevertheless, they are used on a daily basis with patients with pneumonia and also in the control phase of the clinical trials. Maybe the example that is more commonly known is hydroxychloroquine, whose main evidence comes from a small study of very low quality⁴, which would hardly be accepted to be published in a low impact magazine few months ago.

For years, the physician has heard the old mantra about insufficient sanitary resources to attend an unlimited demand, but he/she has never experienced it such evident and dramatic way. Before the insufficient ICU beds and ventilators (the essential tool to maintain the most serious patients alive) the physician, in many hospitals, has had to take the extremely difficult decision of choosing which patients would primarily have access to the ICU's. In this situation, the physicians must have thought about which ethical principles should guide their decisions. Probably, along their professional life, the physician should consider these principles sometimes. But, how to apply benevolence, justice and autonomy when you must decide between two patients who need the ventilator?

There are several important ideas that must be considered. The physician must understand what is crucial to prioritize and what, in order to do that, needs some allocation criteria that will avoid inconsistencies between different centers and professionals. That is the base of the equality principle. The objective must not be to treat everyone the same, but try to treat similarly similar patients. Besides, in a situation like the one previously described, the general interests must prevail over the individual interests. That is why it is ethically justified to ignore the preferences and interests of an individual, and put special interest in the collectivity, the common welfare, trying to save as much lives possible, this means, achieving the greatest benefit.

The experts point out that the benefit and need criteria must guide the decisions. On the one hand, to maximize the benefit means to give priority to patients who can survive by having access to the scarce resources. The main objective must be to increase the number of saved lives and, if possible, to increase the life expectancy of those saved. The need criteria consists on give priority to patients who will not survive if they do not have access to the resources. It seems logic trying to maximize the number of patients who will survive with a reasonable life expectancy, also considering the life years gained with their survival. The criteria to maximize the life years gained should be based on the patient's prognosis, but never on their age, even if this one of the factors that conditions the prognosis. When the interests of the individual are confronted with those of the collectivity, it is inevitable that the eternal debate between a utilitarian vision (term often used in a pejorative

way) and the humanitarian vision. According to the experts, the objectives previously mentioned, maximizing the benefit and the necessity, try to integrate both perspectives:

It is obvious that it is a very complex topic and it is impossible not to talk about it in depth in this paper. There is an agreement about the fact that the decisions must be based on the seriousness and prognosis of the illness, and not on the social or economic level of the patients, nor in factors different from the clinical situation. Also, in the case of patients with an equivalent prognosis, the choice should not be made depending on the order of arrival, but it should be at random so all the patients have the same benefit opportunities (justice). The guides about bioethics made by the Ministry of Health and some scientific societies establish general principles that serve as reference, and frequently agree with the aspects previously mentioned. For example, the document of the Ministry of Health states that the adopted measures should be based on principles of equality, non-discrimination, solidarity, justice, proportionality and transparency, among others. But those general principles may not be so useful for the physician who, in an emergency situation, has to decide which patients will have access to the ICU's and ventilators, and which will not. Therefore, it is recommended to create local committees of experts who value the patients and apply the established criteria, liberating the clinical assistants from making the hard decision which measure to adopt.

There are also aspects where the guides and the experts do not agree. For example, there is a debate about the instrumental value of life, this means if the lives that, for several circumstances, may have an impact on other people, should be prioritized. This would imply prioritizing the treatment of health care professionals, who are essential to treat other patients, or giving more value to the lives of people with kids or other relatives they are in charge of (compared to people with no kids). Also, there are authors who defend that it is ethical to take away a ventilator from a patient with a very bad prognosis to give it to someone else with a better prognosis, as this would be following the principled of saving lives and life expectancy¹⁷. However, there are some who question the ethics and legality of such action.

Beyond the ethical controversies, the main lesson for the medicine student is to understand that bioethics is an essential subject for the practice of medicine and that, in a health emergency, with a demand much superior from the offer, it is crucial to prioritize, this means, to adopt general decision criteria. The application of such criteria should be standardized, avoiding the individual and discretional application on behalf of each physician²¹. The criteria must be public and transparent, and ideally, they should be submitted to public scrutiny, with a clear process of accountability. That is the only way to preserve the society's trust in the health system.

It seems evident that the digital skills are absolutely necessary in an each time more virtual world. But the virus, besides causing a pandemic, with hundreds of thousands of sick people and with dozens of thousands of deaths, it also had the capacity ("the power") of altering the standard educational practices. This, that has been a great inconvenience because we were not prepared for that, also represents a great opportunity to improve the teaching and learning process in the future²³. It is more likely that coronavirus turns into the catalyst of some changes in medical education that were already foreseen²⁴. Face-to-face teaching, suppressed by force during this crisis, will probably be reduced in the future medical education. For example, in the U.S.A., only a third or less students go to classes during the pre-clinical courses when they have the choice of seeing recorded classes from home. Besides, it has been estimated that the student can assimilate the content of a one-hour class, watching at double speed, in only 30 minutes, with the time saving it implies.

Probably, when virtual education is established, the face-toface classes will also be established in a different way and could be used to study in depth specific aspects and promote interaction between students and teachers.

During the clinical years of formation, when the most important thing of medical teaching is the direct contact with the patient, virtual teaching will have a lower starring role, although it will also have its space for sure. If fact, there are universities that have developed the so known "virtual campuses", with videos of clinical interviews to patients, interactive clinical cases, virtual reality, podcasts, computer simulation, virtual discussion sessions about clinical cases, etc. And it seems logic that the practice of telemedicine goes together with the development of virtual medicine education. If future physicians have to practice telemedicine, they also have to practice it. There are already international initiatives that have included telemedicine in their teaching, for example, by facilitating virtual interviews to patients.

Experiences, positive and negative, are clear opportunities to learn, but only the systematic analysis of experiences and the real desire to move forward to the future, will make possible that the pandemic becomes the motor to innovate in medical education.

In these moments of crisis, our country faces a big challenge as citizens and society; that is why, the ethical aspects of medicine are so important, since we must be aware of the problem and not make decisions that worsen the situation and generate, by negligence, bigger problems.

The ethical aspects are in several fields and are constantly changing, there are many variables that determine which decisions to make with the patients, having into account the scarcity of supplies, the hospitalization costs, the acquisition and distribution of tests, the granting of protection material to the health care personnel. That is why we must conduct ourselves with the basic principles of justice and no maleficence.

This pandemic will show our values as society and will challenge the governments to implement better health policies,

improve the hospitals' conditions with appropriate equipment and supplies, decreasing the vulnerability of the health care staff; this way, there will be a positive impact on the patient's attention, taking care of their integrity and their right to decent health care services, even in those cases where it is not desired to intubate them or apply invasive maneuvers.

During this quarantine, where uncertainty and an economic crisis prevail, it is necessary to learn from mistakes and generate positive changes for future pandemics, decreasing contagions, having the best hygiene habits and granting a higher budget to the public health care system in order to have better equipped hospitals and better trained health care staff. COVID- 19 has made us see the great deficiencies and shortages there are, due to bad governors with a lack of public health knowledge. As a country, we must stay together and help the less favored ones, and move forward together, because ethical decisions with a wide sense of justice are completely necessary.

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