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The dilemma of the last bed

El dilema de la última cama

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ABSTRACT

Introduction: the appearance of global crises generates new ethical crossroads in health care. The scarcity of resources raises questions, such as the allocation of the last bed. This situation involves deep ethical conflicts in its resolution.
Objective: to argue the existence of a fallacy, within the concept of the dilemma of the last bed.
Development: basic bioethical principles must prevail at all times, even in crisis situations, which require quick and effective solutions. The role of patient selection is crucial, but it is also the moment in which the great ethical dilemmas find their greatest expression. A reservation system based on categorization, in which all patients according to their clinical condition are considered eligible, seems to be the most appropriate option. The dilemma of the last bed is a fallacy, because as it is formulated, it lacks an admissible solution under the prism of ethics, under a person-centered vision, there should be no such dilemma.
Conclusions: if a utilitarian system is avoided, which forces the doctor to choose, putting into practice a personalistic model, the dilemma as such must not exist.

Keywords: Bioethics; Bioethical Issues; Patient Rights; Coronavirus Infections.

RESUMEN

Introducción: la aparición de crisis globales, generan nuevas encrucijadas éticas en la atención en salud. La escasez de recursos suscita interrogantes como la asignación de la última cama. Esta situación conlleva profundos conflictos éticos en su resolución.
Objetivo: argumentar la existencia de una falacia dentro del concepto del dilema de la última cama.
Desarrollo: los principios bioéticos básicos deben prevalecer en todo momento, aun frente a situaciones de crisis que requieren soluciones rápidas y eficaces. El rol de selección de pacientes es crucial, pero es también el momento en el que los grandes dilemas éticos encuentran su mayor expresión. Un sistema de reserva basado en la categorización en la que todos los pacientes, acorde a su condición clínica, sean consideren elegibles, parece ser la opción más acertada. El dilema de la última cama, es una falacia, porque tal como está formulado carece de solución admisible bajo el prisma de la ética, pues con una visión centrada en la persona no debería existir tal dicotomoía.
Conclusiones: si se elude un sistema utilitarista que obliga al médico a elegir, y se pone en práctica un modelo personalista, el dilema puede desaparecer.

Palabras clave: Bioética; Discusiones Bioéticas; Derechos Del Paciente; Infecciones Por Coronavirus.

INTRODUCTION

The emergence of new global crises generates the development of new ethical dilemmas, and the exacerbation of previously known healthcare-related problems. However, despite these dilemmas, medicine cannot remain in a state of lethargy when dealing with these new situations involving sensitive aspects of human well-being and life. It is imperative to develop new strategies to meet these challenges, maintaining the classic principle that imposes on us that the first action should be not to do harm. The clinical problems the crisis raises must be solved and human life must be protected as the essential and inalienable principle that becomes the core of the medical action.

Crises do not avert their onset, they develop and the search for solutions is necessary, for which, in many cases, healthcare systems are not prepared. The world is immersed in the most serious crisis of health that humanity has ever faced. It is an unprecedented problem in world history that has given rise to profound ethical dilemmas concerning its management and prevention. The onset of a novel virus in January, when the first cases were reported in China, seemed as isolated from reality as if it was taking place on Mars.[1] Despite this belief, the virus continued its relentless advance around the world. On March 11th, 2020, with 118,300 laboratory-confirmed-positive cases and 4,292 deaths, the WHO declared it a pandemic.[2]

The virus continued to spread around the world like no previous disease had ever done. By May 15th, 2020, it had caused 4,338,658 confirmed-positive cases, of them 297,119 people had died. Diseases of this magnitude are creating ethical crossroads in the research and use of new drugs, in the treatment and prophylaxis of the new pathology, and the accelerated implementation of public health measures that had not been applied on a large scale for decades.[3]

But these are not the only dilemmas that arise in this hostile environment; the high rate of infection causes the number of critically-ill patients to increase rapidly, making it difficult for the healthcare systems to trace them effectively. This reality is not especially pressing in low and middle-income countries, which do not have the necessary number of intensive care units, nor do they have the possibility of building new hospitals to care exclusively for COVID-19 patients. It must be taken into account that, even if the funds for the construction of these new facilities are available, equipment and personnel are required to provide timely care.

The collapse of the healthcare systems is one of the great challenges the pandemics brought about,[4] at a time when the compensation mechanisms of the systems are insufficient, and the last desperate measures fail, it must be contended with a vast dilemma that involves everything from the process of selecting patients, to those who are institutionalized. Who should be given the last bed that is left? - It is the great question, difficult to be answered when you have two or more patients who urgently require this space and its equipments to protect their lives. This duality has been known as the last bed dilemma, called by others the last bed ritual.[5] For these reasons, the objective of the present work is to solve the last bed dilemma.

DEVELOPMENT

Bioethical principles in COVID-19 times

A Magna Carta was established that includes the basic principles of medical action, these are: the principle of priority for the well-being of the patient, the principle of patient autonomy and the principle of social justice.[6] The first of these principles is based on the need to guide medical services to serve the interests of the patient. It is in situations such as the present one that all healthcare system is placed in the work of prevention and management of pathology, where the well-being and the life of patients prevail as the central basis of medical action.

The second principle decrees the frankness of the medical doctors with the patient in their care, offering the best options that medical science has at this certain time, but leaving the patient the possibility of admitting or rejecting the management offered. This principle has been restricted to a certain extent by the public health actions implemented. Based on their autonomy, COVID-19 infected patients could go out on the streets and infect others, but in situations like this one, the greater good prevails, so that putting the well-being of the majority at risk invalidates the principle of individual autonomy. The last principles of the Magna Carta is based on social justice, establishing that any kind of discrimination must be avoided, providing timely, quality and warmly care to all patients.

Beauchamp and Childress formulated four fundamental bioethical principles,[7] these are: autonomy, beneficence, non-malfeasance and justice. The first implies the freedom of choice on the part of the patient by having as much information as possible to ensure that he or she makes the most favorable decision. Beneficence commits every action to the benefit of the well-being of patients. The principle of non-malfeasance takes up again the concept of "Primum non nocere" (first, do no harm). It requires respect for human integrity, by preventing medical action from generating harm, and includes the assessment of even iatrogenic injuries. The principle of justice involves equity in the provision of healthcare services, considering health as the second supreme good, only after life.

There are other ethical principles involved in medical practice that are more pragmatic, and include aspects as: priority, humanitarianism, solidarity, self-determination, informed consent, confidentiality, and truthfulness.[8] All of these principles are considered inviolable, although when dealing with a pandemic of the magnitude generated by SARS Cov-2, the basic principles must be enforced. The medical professional must adhere to a person-centered approach, promote respect and dignity for the life of the patient which is maintained at all times as the core objective of medical practice.

It is not the purpose of this paper to review all the principles that the various models of bioethics advocate, but only to make it clear that even dealing with crises such as the current one, the principles are inalienable. The approach and the search for solutions to the lack of ICU beds or mechanical ventilators should not be to the detriment of the fundamental rights of the patient. The physician must do everything in his/her power, but maintaining the dignity of the person.

The time of selection process

It is not the same to philosophize about the storm from the sand of the beach, as to face the turbulent sea in a barge that threatens to sink into the sea. This analogy is useful to understand that the theory must go further, to the practice that intensive-care specialists and doctors in the front line must face up. The catastrophe was installed on a global level, the horrifying stories are lived daily, the boundaries between the ethical and what is not ethical have begun to be blurred. The never-ending question that must be asked when dealing with calamity is gestated, for the moment one only has the option of enduring the onslaught and doing the best for each patient.

When resources are scarce, drastic measures are required, such as those proposed by Italian physicians, consisting of directing those essential services, such as ICU beds and mechanical ventilators, to those patients who can obtain the greatest benefit from them.[9] This scenario places the decision-making in the hands of the physician in charge of selection process; as s/he must choose those patients who will go on to occupy an ICU bed, over others who will be offered services outside the critical care unit.

The ethics of medical resource rationing is a thorny issue that must be addressed. It is clear that all patients have the right to quality medical care, and the use of the best technologies available. But when this technology is running out and the number of patients is so large that health services collapse, a rational approach to the situation becomes necessary, which in many cases borders on the unethical practice. Principles have been established for the allocation of medical resources in the face of scarcity, these are: treat all people equally, favor those who are worse, maximize total benefits and utilitarianism: promote and reward social utilities.[10]

The first principle requiring equality in its original development included the practice of serving the first come, a not viable and unethical action. Equality is maintained in random selection for patients with identical prognoses. The second premise, which favors the sickest and the youngest, is subordinated to the condition of obtaining the greatest benefits. The third principle that mentions maximizing the total benefits, involves saving as many lives as possible, by prioritizing according to the prognosis of each patient. The last premise leads to the privilege of those who have made important contributions, or who could make them if they were saved, such as scientists and health personnel, but only when other factors, such as maximizing benefits, are equivalent.[11]

Maximizing the total benefits should be carried out through the judicious use of resources, to save the greatest number of lives and increase improvements in the quality of life of patients after treatment.[12] Life should be maintained as the maximum value, but the number of patients who will survive treatment with a reasonable life expectancy should be maximized. When the prognosis is the same in a group of patients, the allocation of benefits shall be done in a random way, thus providing all of them with the best possible care.

The rationing of resources becomes necessary, but this should not be a mechanical activity, but a dynamic action that includes clinical judgment, based on the best available evidence.[13] Traditionally the selection of patients for ICU is based on the number of available beds, admission diagnosis, and severity of the disease, age and functional status. It is known that even under normal conditions, the number of patients admitted decreases if most critical care beds are occupied.

The concept of resource allocation, in relation to the greatest medical benefit for each patient, is what is known as triage. It consists of offering the most appropriate care to each patient based on the appraisal of the disease and its emergency.[14] This selection and the rationing of resources are complex decisions that are facilitated if the principles to be put into play are clear.

The role of patient selection is decisive both in deciding which patients will enter the ICU and in discontinuing ventilation for others. It is desirable to separate the triage role from the clinical part to improve objectivity, avoid conflicts over commitments, and reduce distress for the treating physician.[15] A standby system has been proposed for patient selection based on a classification by category, to which an order of priority has been assigned,[16] this model overlooks the problems of justice and equality that other prototypes fail to solve. Within this paradigm, there is no exclusion; all patients are eligible for classification in the different categories assigned by their assessment. These classifications are dynamic according to the evolution of the patient or the availability of new resources, which can cause patients to move quickly from one category to another, as soon as it is necessary. In this way, the principle of doing the best for each patient inside or outside the ICU is maintained.

Deciding the patient who will be placed in each category should be guided by the same principles that have always led the selection of patients for ICU admission; the same applies to the use of ventilators. The criteria should be eminently clinical and prognostic, never based on irrelevant issues such as sex, race, religion, citizenship and social status, among others. This reduces the probability that crises such as the current one will highlight the existing social inequities.[17]

A standby system based on patient categorization is not recent; it has been used for a long time by organ transplant programs, based on waiting lists and eligibility criteria.[18] Categorizations have also been used when massive events occur that generate a high casualty rate. In this scenario, the severity of the injuries and the number of patients requiring care is beyond the capacity of health services and personnel. Priority is given to patients who are more likely to survive and who require less investment in time, equipment, supplies and personnel.[19]

However, these models are based on the exclusion of patients, which leaves the bioethical concepts of equality and justice in doubt. In an ideal model for dealing with a pandemic such as that generated by SARS Cov-2, all patients should be in one category, although reality cannot be avoided, given the lack of resources, what little one has must be well used, thus achieving the greatest possible good.

It should not be lost sight of the fact that the use of a ventilator and ICU care are therapeutic options that are added to the battery of medical management, in no way representing a promise of unlimited survival; this should be made clear to family members and patients from the first encounter. It should always be brought to bear in mind that unnecessary ventilation and intubation of one patient may deprive another patient of life, especially in an environment of limited resources. Other measures of respiratory support should be assessed, if the clinical condition of the patient allows it.[20]

In addition to the clinical condition, it is important to clarify which other aspects will be assessed in order to classify the patient in one category or another. The principle of maximum benefit should be taken into account, in order to save the greatest possible number of lives, but especially valuing those patients with a greater probability of life after treatment. People have the right to live all stages of life; therefore, children and young people should be placed in categories that bring them closer to the use of an ICU bed, if they are saved with it, in line with the general assessment.[21] For utilitarianism, health personnel and those working on the front line of the virus battle should be placed in the first categories of eligible.

The prognosis should be meticulously evaluated; the criteria to be applied should be clearly based on clinical practice guidelines, which should be standardized. This is not only to avoid the possible legal repercussions that assigning a patient to a category may entail for medical professionals, but rather to facilitate decision-making by reducing compassionate distress. The prognostic scales applied should be based on the best available evidence, and it is undeniable that aspects such as the age of the patient, the presence of multi-organ failure, and the non-response to treatment, previous systemic compromises and a very quickly deterioration of the clinical status, influence the prognosis of survival in a convincing way.[22]

If a traditional model of selection were applied, patients with these characteristics would be excluded from eligibility, which undoubtedly violates the principle of justice and equality; under the categorization approach there is no such exclusion. Patients would be placed entirely into categories according to the availability of resources and clinical response, which means that they would always be eligible, even if they were assessed in the latter categories.

The fallacy of the last bed

Public healthcare emergencies, whether of natural origin (e.g. pandemics) or deliberate (e.g. terrorist attacks with biological or chemical weapons) push healthcare systems to the limit of their capacities, requiring responses that differ from those already established.[23] It is in this context of over demand that the so-called last bed dilemma arises, which is incompatible with the lack of resources to effectively deal with the entire flow of critical patients demanding intensive care.

The medical community would face this scenario in a hypothetical disaster situation, in which the intensive care unit has reached the limit of its installed capacity for the care of critical patients. In the emergency unit, serious patients continuously arrive and require urgently use of an ICU bed and a mechanical ventilator, which for these purposes only the critical care unit, has.

This situation can manifest itself in various ways, one of which would be the arrival of a single patient, with the triage assignment having only one ICU space, the physician would be placed before de dilemma of whether or not to assign the bed, and if another patient with a greater chance of survival were to present himself later, the physician would have to remove the newly admitted critical patient in order to admit the other person.[24] In this case the physician can make use of the reasoning of a single patient by assigning him/her the bed, since the physician cannot predict how soon the next patient will get there, although in a crisis it is most likely to be soon.

The darkest situation for the doctor in charge of triage, after the collapse of the healthcare system, would be the arrival of five or more critically-ill patients in equal clinical conditions and with an identical prognosis, all requiring immediate intubation, admission to ICU and placement of a mechanical ventilator. The doctor would be aware that there is only one ICU space, so the physician would be in the middle of a big dilemma. Given the magnitude of a pandemic like the current one, scenarios like this will be frequent, putting the recruiter in conflicting ethical paradoxes.

A fallacy is defined as an argument, which is used as if it was valid, but which in reality is not.[25] The dilemma of the last bed falls within the definition of fallacy because its postulate exposes a crossroads that argues as valid when it is not; in practice it lacks an appropriate solution. Logical outcomes can be formulated, but they are invalid, because they violate the most basic principles of bioethics. In this context solving the dilemma in one way or another, leaves the person dealing with the potential implication of violating bioethical principles.

In practice there should not be such a dilemma, indeed the described scenario may occur, but the physician will not have the dilemma at any time if he or she adheres to a person-centered approach, since the physician will value one patient at a time, will focus solely and exclusively on the person he or she is treating at that time, and will not justify it under any circumstances based on the number of patients. So, if such a chaotic context arises, physicians should assign the space to the person who needs it most, and then they would look for the way to do the best for all patients, solving one problem at a time.

CONCLUSIONS

Delicate scenarios make it necessary to make decisions, in many occasions, in a short time. Contexts such as the current pandemic, which generates a high rate of infection resulting in a high number of patients with severe respiratory distress requiring intubation, the use of ICU beds and connection to a mechanical ventilator to safeguard their lives, raise profound ethical dilemmas for the management of these patients.

Healthcare systems, however advanced they may be, have limited resolution capabilities that are vastly exceeded when the flow of patients demanding care is large. Given the lack of resources, the logical solution would seem to be rationality, to allocate on the basis of the greatest utility. This may be valid in health management, but it is not in bioethics, where the principle of valuing each life as the greatest worth is maintained.

The so-called dilemma of the last bed arises in the presence of multiple patients in equal conditions that require ICU space when only one bed is available. It is argued that, under a utilitarian vision, the physician is forced to choose who will have access to that last place. The thesis of this paper refutes this argument, since, under a person-centered approach, the physician should not be placed in this situation. The dilemma as such is an ethically

irremediable fallacy, but there should not be such a dilemma when the physician focuses on the person, not on the results, since the physician will see only one patient without taking into account the population that requires the ICU space. The premise is one patient at a time, this one is resolved and then to accomplish the duty to do the best for the other person.

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