Acta Biomed 2020; Vol. 91, N. 4: e2020167 DOI: 10.23750/abm.v91i4.10569

Medicine and humanism in the time of COVID-19. Ethical choices

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Summary. The Covid-19 pandemic has been the most defining event of our era. The world of healthcare has experiencedfirst-hand the dramatic situation of treating patients in the face of the dangers of contagion and limited re-sources. Difficult choices have everywhere been made alongside ethical reflection. Now that the viral infection is resurging, after a transient period of decline, there is an urgent need for fresh, anthropological, ethical reflection. It is important to avoid being unprepared to the possible occurrence of a similar event in the future, but above all, to now think in global terms. This is because the pandemic has forced us to recognise the urgency of building alliance in healthcare and a balanced relationship with the environment. (www.actabiomedica.it)

Key words COVID-19, ethics, bioethics

Introduction

The COVID-19 pandemic with which we have struggled in recent months has, for our community, been one of those epochal events that create a rift between the before the after, relativising and making a remote memory of the normality we once experienced - as if it belonged to a previous life. But, at the same time, these events also offer new keys to interpretation and opportunities for reflection on existing topics and devices which, in the developing scenario, take on new light and relevance.

It was during this "previous life" that the Clinical Bioethics Department of the Gaslini Institute was established in 2019. It was set up to provide a protected context in which to debate in cultural terms, and also to support and address clinical decisions for healthcare professionals - when faced with dilemmas and ethical issues - and on completion of a series of seminars[1] on the COVID-19 pandemic, it was naturally involved in offering an anthropological, ethical reflection on the many issues arising.

There are two aims: the first is directly concerned with the contents of the ongoing debate, to offer practitioners an initial interpretation and orientation on the subject, recognised as one of the most compelling and topical, and identify criteria for access to intensive care in situations where resources are not sufficient to meet all needs; the second - of a more methodical, cultural nature - is the concrete exemplification of a bioethical reasoning process and its essential steps, through scientific, anthropological and moral dimensions.

1. Data on the pandemic

It was on 20 February 2020 when the first case of COVID-19 was diagnosed in Italy at Codogno hospital (LO) in a 35-year-old man. But on the following day, 21 February, 36 cases were recorded in Lombardy. For SARS-CoV-2 the time taken to double the number of cases is 2.5 days, which means that by 21 February the number of infected and contagious people was much greater than the number of cases diagnosed up to that point. Suddenly, we were faced with a phenomenon that would soon lead to an enormous number of infections and would place the National Health System in great crisis.

The first epidemiological data, on which a forecast of the need for intensive care beds could be drafted, came from China[2] and involved 72,314 patients. Of these:

- 81% had a mild illness;
- 14% had a serious illness;
- 5% had developed severe organ failure, requiring admission to intensive care;
- this last group of patients had a mortality rate of 49%

Based on this data, it could be expected that out of a population of approximately 70,000 infected patients, at least 3,500 would require admission to intensive care.

One month later, on 25 March 2020, the situation in Lombardy was as follows[3]:

- 17,800 patients had tested positive;
- of these, 1,581 had been treated in intensive care (9%);

  and, of the 1,581 patients treated in the ICU:
- 256 patients had been discharged;
- 920 patients were still in hospital;
- 405 patients had died.

These figures illustrate a situation in which it emerged that the need for intensive care beds in Lombardy was enormously higher than the supply. Lombardy is normally equipped with 750 intensive care beds, amounting to 2.9% of the total hospital beds. Additional beds were set up for the COVID emergency, resulting in a maximum availability of up to 1,650 intensive care beds.

However, the statistics offer little impression of the dramatic nature of the events that occurred. The images of coffins transported by military trucks will remain an indelible memory for everyone. There are witness accounts of 500-metre queues for ambulance access to the emergency departments of some hospitals in the worst affected provinces. In this context of emergency, of enormous psychological pressure for healthcare practitioners and the total lack of beds, ventilators and therapeutic devices, there was a need for guidance that could provide support in the allocation of available resources.

2. The multiple issues

The exceptional severity of the pandemic has raised many human and ethical questions that have been the focus of consideration due to their unprecedented nature; one thinks of the restricted social and individual freedoms; the confinement of people in at-risk categories; those who have died far away from their loved ones; organisational changes in healthcare facilities, efforts to increase suitable facilities and procure the necessary medical devices; the health and safety of healthcare workers; the extended working hours in a context of prolonged emergency; the urgent need for correct scientific information and ever-improving coordinated research; the need to avoid doctors and nurses having to take decisions alone when the fate of others depends on them.

These and other issues have been considered in numerous international ethical documents. The period of containment has restricted many individual freedoms; now, in the name of common interest and public safety, how can individual autonomies be guaranteed? Of course, the measures must be proportionate, strictly necessary, and verified by scientific data[4]. If the urgency has justified state intervention, the exit from containment while the threat of the virus still remains requires civic virtues such as responsibility, solidarity, and trust.[5]. Doctors are prepared to take care of people; the emergency has required that priority be given to the community over the individual; and this creates tension[6]. The criterion of public interest, when applied

to medical care, must be set against the principle of dignity of every human being[7]. Human rights in biomedicine, recognised and highlighted at the Oviedo Convention[8], are strongly favoured - in the time of a pandemic - by the virtue of solidarity and the principle of responsibility[9]. The pandemic situation calls for the creation of a more convincing human fraternity: we are in solidarity in terms of progress, but also in individual limitations; medical care builds a human community, that goes beyond differences[10]. In conditions where therapeutic options are scarce, these principles must be applied: fairness (no discrimination in the distribution of available resources), saving as many lives as possible, protecting the specialists involved[11].

Each of these topics could be the subject of reflection and insight. In this reflection we would like to linger on an ethical question that can be formulated in various ways: how to decide who has access to intensive care? Who should be given priority? What criteria should be adopted in the face of an emergency in which we cannot ensure enough intensive care beds, devices, and effective treatment for everyone? Are we acting in the interests of the common good if we use community resources to treat patients who derive no benefits?

These are uncomfortable questions that one would wish to avoid, hoping that the situation never arises. Yet here we are.

The ethical debate has taken place at various levels: local or international; personal or team, journalistic or in-depth. Every plan has its value but can sometimes also have limitations. The dissemination environment, for example, is effective, but does not always take into account the complexity of the phenomenon.

We have chosen to present three significant standpoints that emerged in the Italian context, with reference to the international literature when necessary.

3. The Italian context

We draw attention to the following documents, which we are approaching from a specific perspective: that of determining the criteria for admission to intensive care, setting other aspects aside, however significant.

Firstly, the "Recommendations on Clinical Ethics for admission to intensive treatment and its discontinuation under exceptional conditions of imbalance between need and available resources", issued on 6 March 2020 by the Italian Society of Anaesthesia, Analgesia, Resuscitation and Intensive Care (SIAARTI). Then there is the document dated 8 April 2020, entitled "COVID-19: clinical decision-making under conditions of scarcity of resources and triage criteria in a pandemic emergency", by the National Committee for Bioethics. Finally, the text "Reflecting on clinical triage criteria in the time of the COVID-19 epidemic", published by Scienza & Vita on 2 April 2020.

The following standpoints emerge from these documents, which show common elements and developments.

3. 1. First standpoint: setting a limit?

It has been established that, in the context of a pandemic, it is essential to assess: the treatment undertaken in proportion to the well-being of the patient. In the context of an extraordinary situation of lack of intensive resources and scarcity of available options, clinical suitability must be established, which emerges from the severity of the disease, the presence of comorbidities, the impairment of other organs; the greatest life expectancy.

It may be necessary to set an age limit on admission to the intensive care unit. It is not a question of making purely valuable choices, but of saving resources that may be very scarce for those who have, firstly, a greater chance of survival and, secondly, those who may have more years of life saved, with a view to maximising the benefits for the greatest number of people. The occurrence of comorbidities and the functional status must be carefully assessed, in addition to the chronological age. It is conceivable that a relatively short course for healthy people becomes potentially longer for elderly or frail patients or those with severe comorbidities. This places greater economic burden on the health service.

The reasons and values that support this standpoint are: determination of the clinical appropriateness (overall clinical assessment, urgency, seriousness

of the situation), the proportionality of care (relationship of means with results), distributive justice, and the appropriate allocation of limited resources (avoidance of waste).

A number of recommendations are then provided. Everything must be done to avoid having to choose between one patient and another: making use of other facilities, increasing the available medical devices, working long-term for health care policies. Those who are not deemed to necessitate treatment in intensive care must have access to inferior treatment. Furthermore, the choice must be shared between the health professionals involved, and properly communicated to patients and family members. Finally, clinical practitioners must be relieved of some of the responsibility for their emotionally demanding choices.

What observations can be made? Those who welcome this criterion note that exceptional conditions require precise standards and recommendations that have a central place in ethical life. On the other hand, those who do not share this standpoint fear that social criteria - such as e.g. age - may be a determinant in assessing who should have access to intensive care. This will be more evident in the second standpoint.

3. 2. Second standpoint: clinical appropriateness

Clinical appropriateness emerges from a medical assessment of the efficacy of the treatment with respect to the clinical needs of each patient, with reference to the urgency and severity of the onset of the disease and the prognostic possibility of recovery, taking the proportionality of the treatment into consideration. The criteria for establishing clinical appropriateness are: the degree of urgency - the severity of onset of the disease - and this is a priority; the severity of the overall clinical picture; comorbidities; age, as it relates to the context; the treatment efficacy, with regard to the greatest chance of recovery. All other non-clinical criteria of prior selection are considered unacceptable.

In addition to clinical appropriateness, there is the assessment of current situation, i.e. the condition of this patient within the broader perspective of the patient community. The "first come, first served" system does not apply.

These are the values and reasons that underlie the second standpoint: the protection of life and health; solidarity; freedom; responsibility; justice, fairness, which is the convenient application of the rule to the concrete case; transparency in choices.

All these elements lead us to choose only the clinical criterion as the ethical one. In fact, those who support this second standpoint highlight the need to consider medical criteria, leading to an assessment of individual patients according to their clinical and personal situation, rejecting the idea that access to intensive care may be ruled out a priori for social and personal reasons.

It is interesting that this standpoint is confirmed in various ethical documents, including international ones: "age, gender, social status, ethnicity, disability, possible responsibility for having contracted the virus, pathologies, costs"[12] are ethically unacceptable criteria. "The decision – as to who to admit to care, *Ed.* - cannot be based on differences in the value of human life and the dignity of the person"[13]. Moreover, "the available resources must be shared out without discrimination or unjustified differences in treatment relating to age, gender, nationality, religious denomination, social position, insurance situation, or place of residence".[14]. This is because "every human life enjoys the same protection; differences based on gender, ethnic origin, age, social role, or life expectancy are prohibited"[15]. In fact, 'we all have the same rights, with no discrimination based on age or disability'[16]. In conclusion, even in uncertain situations "the decisions to be taken must satisfy the fundamental requirement of respect for human dignity, i.e. the individual value of each person must be recognised as absolute"[17].

On the other hand, those who are against it believe that the clinical criterion is not sufficient in itself; for this reason, the age factor constitutes a significant reference, to be considered independently. Choosing to include age in the clinical criteria would, on the other hand, mean widening the potential number of patients dramatically.

3. 3. Third standpoint: maximum benefit

Realistically, there are tragic moments when it is not possible to save everyone. The decision as to whether or not to admit to intensive care cannot be based on a physical or mental disability. Healthcare professionals should, however, find out whether another ventilator can be found within a reasonable time, and whether the patient can be safely transferred to another facility.

If a choice between patients must be made, this must prioritise: those who do not suffer from this disadvantage - by prolonging unavoidable suffering - and those who will reasonably benefit in terms of survival.

Without these criteria, it is not possible to decide in advance who deserves to be treated.

This standpoint gives rise to a number of recommendations: what would be the most opposed to good medical practice would be to entrust any decision to strict protocols. Of course, safeguarding for practitioners can be ensured by rules, but in reflecting on the ethics we cannot lose sight of the singularity of the patient's situation.

4. Comparison of standpoints

A few remarks have already been made. Now let's look at this in greater detail.

4. 1. Balance between the standpoints

In fact, the three standpoints were developed at different times, with a time gap between the first and the last two. The first document came at a dramatic time, in which supporting practitioners seemed to be the priority, since resources were largely inadequate in relation to the need for treatment. It is perceived that the intention of the writers was to rationalise the use of resources with the aim of saving as many lives as possible. It may be necessary to set an age limit: this statement in the document is not dissociated from reference to the clinical criterion and a broader assessment of the patient and the context. Moreover, the document certainly cannot be interpreted as a strict protocol, and in itself contains criteria that are better expressed by the two subsequent standpoints, which were developed after more time for reflection.

An extremely measured approach to the problem has been proposed by Savulescu J et al[18], who have developed a decision-making algorithm, presented in Table 1, which seems to summarise the three standpoints described above.

4. 2. Principle of proportionality

What the different standpoints have in common is the reference to the ethical principle of therapeutic

Table 1. Decision-making algorithm proposed by Savulescu J et al (see ref. 18)

Step	Action
Step 1	Adhere to the principle of therapeutic proportionality, taking into account the patient's convictions and wishes
Step 2	Prioritise treatment of the most urgent cases
Step 3	Consider the availability of resources and use them when possible (creation of new beds, transfer to another hospital, etc.)
Step 4	Use the clinical criterion to allocate resources to those most likely to survive (aim to save as many lives as possible regardless of the age criterion)
Step 5	If resources are still insufficient, use a second criterion of choice, e.g. age, according to the principle of distributive justice (offering a chance of survival to those who, with the same clinical condition, have enjoyed fewer years of life)

proportionality. Indeed, "the question is not to define new, more or less arbitrary criteria in exceptional conditions in advance, but, again, to determine the proportionality/disproportionality of treatments in individual cases"[19]. The principle of proportionality is normally used to establish a concrete proportion between the options used and the therapeutic efficacy. According to this criterion, for example, one must refrain from diagnostic tests, therapies, or surgical procedures that are too arduous, hazardous or unnecessary for the patient.

4. 3. Protocols

The standpoints seem to differ on whether or not to arrive at moral and clinical indications. Based on the first standpoint, indications must be formulated in order to guide practitioners and also to relieve them of part of the responsibility; similarly, the second gives rise to the need to limit the professional responsibility profiles of clinicians.

On the other hand, it is significant that the third expresses opposition to entrusting all management of a patient or hospital to strict protocols.

4. 4. Personal conscience

These findings offer us the opportunity to reflect on some ethical considerations that also apply to other situations. Let's start with one question: "does bioethics mean applying principles, values, or reasons to a specific case?" Or "does practising bioethics means starting from the situation?" According to this last perspective, clinical cases with ethical relevance are solved by starting from a concrete case, in order to then assess it in light of those principles, values, and reasons that prove to be the most useful in that situation.

These are two different theoretical standpoints: the first considers that it is sufficient and necessary to refer to principles and values, encoded in recommendations and opinions (the rules take precedence). The second considers that ethical choices are made starting with a consideration of the situation as it appears from the patient's bedside (the clinical case takes precedence).

Now if practising ethics simply meant applying rules and protocols, it would result in less consideration of the specifics of the case, and the individuals themselves would not be pressured into choices and behaviours that go beyond the call of duty, which would instead enable personal improvement.

On the other hand, those who choose to start from the clinical case, from the concrete situation, are not seeking to diminish or relativise the principles, but intend to make a personal discernment and evaluation of conscience. It is clear that values and principles do not change their meaning and compulsion in different situations. However, they must be applied wisely, according to the moral criterion of discernment, which is the ability to evaluate the concrete situation in order to choose the most suitable course of action, according to reference values that have been acquired personally. To practise discernment is to exercise the moral virtue of prudence; assess the situation, express judgement on what to do and determine the most appropriate choice.

But there is something more: in the first case, that of mere application of principles and rules, after all, anyone would find themselves in the position of mute spectator, in the external condition, that of the "third person": hence the expression: "third person ethics." In the second case, however, supremacy is not given to the rules, but the moral subject, who wonders how he can simultaneously achieve: the correct moral choice, and also maintain his own humanity in light of the values that guide his own existence. Here he is no longer a mere executor, but an individual acting in "first person", hence the expression: "first-person ethics. "[20] And I wonder: "is my professional life going well?" and, "what kind of person do I want to be in the profession?" These questions do not constitute a distraction from what must to be done but create coherence in the profession between "science" and "conscience".

The theoretical approach of ethical rules is certainly not being abandoned, since it can lead to reasoned and shared positions; only it is not all about ethical maturity, which requires the exercise of moral[21]virtues,

There are plenty of people who argue that morality is essentially made up of rules, which have a central place in ethical life; it would certainly be easier to apply

rules and protocols, especially in emergency situations. Yet, reality confirms that clinical choices and medical practice are not only the result of ethical or professional rules, but something more: through these, everyone can write their own personal biography of good.

Discernment of what must be done for the good of the patient and for one's professional maturity can take place through bioethical reasoning. Here, it is not left to the individual healthcare provider to think the issue through, but the entire medical team, thereby bringing the problem into focus and facilitating a discussion that leads to common human, cultural and professional growth. Practising ethics requires effort and commitment because immediate intuition is not enough. Just as scientific judgement works through rational mediation, so does ethical evaluation: "operational application to the ethical issues raised by specific cases must be based on the mediation of appropriate rational *operations*"[22]. And this reasoning unfolds in several steps: identify the moral problem; state your immediate assessment; justify your preference; compare your position with others; outline a solution to the initial moral problem, confirming or disproving your initial assessment; show how you will resolve any remaining irreconcilable opposition among members of the team; recommend a strategy to prevent or limit the most serious[23]contradictions in the future. The ethical dimension works by means of these steps, which must be patiently argued.

In a nutshell, valid discussion of a bioethical case must consider the scientific aspect, recognise the anthropological dimension - in what way the person is involved - and offer moral vision.

4. 5. The age criterion

Finally, a final consideration: in recent months, the ethical debate has mainly revolved around the criterion of age, because, objectively, it could appear discriminatory and - as we have seen - age could be accompanied by other factors. In this regard, those who supported the first standpoint - perhaps as a result of the intense debate that has developed - stated: "it would have taken great effort on our part to make it clearer"[24].

Having reflected on these problems, we must recognise that, realistically, one could find oneself in a situation of having to give priority to someone. However, assessing the possibilities of life does not mean discriminating against people in advance.

5. Future perspectives

Looking to the future in a responsible way also means interpreting what has happened. "Covid-19 is the name of a global crisis *(pandemic*): it presents different facets and manifestations but is undoubtedly a common reality[25]. "Common" because it has brought humanity together in a different way, and because it has highlighted the link with the environment. If globalisation had united us in terms of communication, knowledge, services, exchanges, the pandemic has connected us in a different way: we have shared the dimension of human fragility equally. To the question "what has this epochal phenomenon left us with?" A. Giannini, Head of the Paediatric Intensive Care Unit of the Hospital of Brescia, replied: "everyone has a sense of vulnerability. We had entered a sort of delusion of omnipotence; but there is a dimension of limitation, and this is with us. Like the subject of death, which is increasingly taboo. On the other hand, it has shown us doctors how much our knowledge, albeit extensive and detailed compared with that of previous generations, is still incomplete"[26].

In the suffering and death of so many people, "we have learned lessons about our fragility"[27]; in many countries, hospitals are still struggling to meet countless demands, and healthcare personnel are forced to ration the available resources. We have seen the most tragic face of death, experienced in loneliness and estrangement from one's loved ones at the end of one's earthly existence. Now, "fragility" is not only an obvious fact, it is also an invitation to open ourselves up to a greater awareness of life and appreciation of human existence. Vulnerability has led us to grasp the meaning of the life that has been granted us as a value and a responsibility, which perhaps hasn't happened for some time.

Was someone remotely responsible for the outbreak of the pandemic? The Covid-19 epidemic has much to do with "the plundering of the earth and the

plundering of its intrinsic value"[28]; we only have to consider the chain of connections and interactions between the impoverishment of the environment and the spread of viruses[29]. This pandemic is yet another zoonosis that involves us, with humans behaving no more and no less like the SARS-Cov-2 virus towards the natural ecosystem[30]. Moreover, development models and economic choices, dictated by the maintenance of lifestyles of consumption and excess, also impoverish the environment and the populations of the earth. The poverty of some populations prevents the introduction of health protection measures, or the availability of adequate medical care in some areas.

There are therefore two things to be learned from this time: common vulnerability and the challenge of interdependence. These have not always received due consideration. The emergency has, of course, raised the question of how to save as many lives as possible, how to allocate limited resources, and it has not always been possible to pay adequate attention to other care institutions that treat elderly or vulnerable people on a permanent basis. This was the emergency situation! But, months later, we feel that we need to broaden our perspective: "common vulnerability also requires international cooperation and the awareness that it is not possible to confront a pandemic without adequate health care infrastructure, globally accessible to all. Nor can the hardships of a population infected suddenly be faced in isolation"[31].

The lesson needs to be learned in depth: this also apples to the many gestures of solidarity and neighbourliness that sometimes cost the health and life of those involved. We cannot simply search for what we had before; it is essential to open up to the new.

This era has led us towards a new vision, towards a new beginning for human coexistence. This is a change of course, since we are shifting from presumed safety to an acceptance of risk: we can all succumb to the blows of a pandemic, whose violent spread was partly due to inequalities. While waiting for an effective vaccine, human solidarity must grow, and this goes beyond the commitment to help those who suffer; we must build a broad concept of human community. Solidarity does not have a merely strategic meaning - as if it were the most effective prerequisite for facing difficulties - but is above all ethical: it implies responsibility towards the other as being endowed with dignity (anthropological dimension). Solidarity does not simply see the need of others, but the presence of a person in need. For this reason, the most adequate answer is that which comes from "an ethical provision founded on the rational concern for the intrinsic value of every human being"[32].

Conclusion

While we are witnessing the resurgence of the pandemic after a transient period of decline, we feel the personal responsibility of getting prepared to the resumption of activities in the next "decontainment phase", in which the infection will subside again but the virus may persist. After a period of intense virtual relationships, we must rebuild human relationships on the basis of equality and solidarity, especially with the most vulnerable people. The same preventive and containment measures may offer a perspective of respect, gratitude, fraternity or - conversely, absence of solidarity - distrust, discrimination, fear, and b ravado.

From many sides, there is an urgent need to avoid being caught unprepared in the future, and procedures to be developed have been recommended[33]: national optimisation of intensive care; better networking; more testing; broad support for research on vaccines and treatment options; support for research into the psychological factors of the effects of the pandemic; ongoing reassessment of restrictive health measures; solid information strategy[34].

Above all, because Covid-19 was a natural pandemic with additional human phenomena, it is essential to work on a large scale in the name of the precautionary principle, avoiding choices and behaviours that place human health and environmental balance at risk. To this principle is added that of human solidarity, beyond geographical boundaries. We must strive to provide access to the best healthcare opportunities for all, and work with healthcare facilities in developing countries. International cooperation in the field of health - the work of researchers, doctors, healthcare personnel - and the contribution that research institutes make to other centres around the world, really do constitute effective prevention and make the unity of the human family a reality.

Conflicts of interest

Each author declares that he or she has no commercial associations that might pose a conflict of interest in connection with the submitted article".

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Ethics committee

Since the study does not report the results of any experimental use of a novel procedure or tool and no patient was not involved, the ethics committee approval and informed patient consent were not necessary.

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Received: 07 September 2020
Accepted: 16 September 2020
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