48. Ventilation and intensive care during the stormy days of Corona

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The following are the recommendations of the Ethics Bureau of the Israel Medical Association for starting, continuing and ceasing ventilation in intensive care, under exceptional conditions, when there is a huge imbalance between the needs and the available resources:

In these difficult days, when the Corona epidemic has already spread through China, Italy and other countries, but before a mass outbreak in Israel, we thought it would be appropriate, from a position of "the calm before the storm", to write ethical guidelines for artificial respiration during an epidemic.

As we write, we hope that we will not need these guidelines.

A document written in Italy by a team of experts serves as the basis for the paper.

During a pandemic, medical thinking and ethical considerations change in relation to the normal procedure.

Treatment is characterized by a lack of resources (medical staff, equipment, drugs, etc.) in proportion to a huge number of patients.

In 2008, the Bureau issued a position paper dealing with the ethical aspects of a multi-casualty incident. The introduction states: "The main feature of a multi-casualty event is the lack of ability or means available to the doctor to do his utmost to save life or limb of all the victims."

The guiding professional principle is "to do the most possible for the most victims" and not "the best for everyone".

One of our commitments in that document was that a doctor will not participate in decisions regarding the allocation of limited resources on a non-medical basis, such as age, sex, race, religion, nationality, economic or social status.

These principles will guide us if we come to a situation where we must choose who will receive respiratory and intensive care treatment.

The purpose of the position paper is to make it easier for the medical teams who will have to make difficult decisions, and to provide the factors that will be part of the considerations for making decisions that are not purely medical. These considerations include medical ethical considerations, such as just distribution, equality in the distribution of resources and the patients' chances of recovery if treated.

From the information available at the time of writing the document, ventilation will be necessary for a significant portion of the subjects diagnosed with infection from the corona virus, since the disease is characterized by bilateral interstitial pneumonia accompanied by severe hypoxemia. Unlike the more familiar ARDS picture, the lungs in patients with pneumonia caused by the coronavirus have a better responsiveness and response to

moderate and high PEEP; that is, it is potentially reversible, but the acute phase may last for many days.
From the data over the first two weeks of the outbreak of the epidemic in Italy, about a tenth of the infected patients needed intensive care with the help of invasive or non-invasive ventilation.
It is important that the criteria for ventilation be clear to everyone, both the treating teams and the general public, in order to maintain trust in the health system.

Objectives of the position paper:

A. To make it easier for the treating staff to make decisions about individual treatment, when the emotional burden may be heavy.
B. To define the allocation for health in situations of extraordinary shortage.

Recommendations:

1. The criteria for beginning ventilation and intensive care should be flexible and adjustable at any time in relation to the available resources, the number of patients and the expected number of patients in the future. The criteria apply to all patients in need of intensive care and not only to patients with COVID-19.
2. Allocation is a very complex and delicate choice. An excessive increase in the number of intensive care beds does not guarantee adequate care for every patient who is breathing. The attention and resources directed to too many patients may harm all those hospitalized in the intensive care unit. Similarly, the reduction of elective activity in the clinics, the postponement of elective surgical treatments and the scarcity of intensive resources, due to their transfer to intensive care, may lead to an increase in mortality and morbidity because of clinical conditions unrelated to the ongoing epidemic.
3. It may be necessary to place restrictions on admission to intensive care. If we choose the option "first come, first served" and all ventilators and intensive care resources will be in use, this will preemptively harm the chances of the next patient to live, even if his chances of recovery and a long life as a function of his young age, for example, are better. On the other hand, the decision to limit treatment because of age, for example, may be considered discrimination and a violation of the value of equality, even though it maximizes the benefits of intensive care while preserving resources that may be very scarce for those who are likely to have better chances of survival and a longer life expectancy.
4. The presence of other diseases (comorbidities) and functional status should also be taken into account, and not just the chronological age. The duration of hospitalization in intensive care for a young person without additional diseases may be shorter than the duration of supportive care for an older person with co-morbidities. The length of

time a patient will stay in intensive care is significant in approaching the distribution of resources to more people.

Of course, all professional criteria used by the intensive care specialists must be taken into account.

5. It is important to take into account the patient's wishes, expressed in advance treatment instructions for concomitant diseases, if any were given, or through joint treatment planning.
6. Decisions on the provision or non-provision of advanced treatment, such as ventilation in intensive care, must be made by the team, involving the patient to the extent possible, and documenting the considerations and the decision in the medical record.
7. Any restriction on the provision of intensive care in the exceptional, extreme situation of a discrepancy between the number of those in need and the resources available must be supported by criteria of distributive justice.
8. In the decision-making process, when situations of difficulty and uncertainty arise, it is advisable to consult, even by telephone, in order to hear another opinion, one of the following: institutional ethics committee, department manager, senior management or practitioners who have experienced similar situations.
9. It is worthwhile to discuss and define the criteria for ventilation and intensive care for each patient as early as possible, in such a way that it will be possible to best create ahead of time a list of patients who will be considered appropriate to receive intensive care if a clinical deterioration in their condition occurs, provided that it will be available when they need it.
   A "do not resuscitate" instruction should be recorded in the medical file, ready to be used as a guide, if clinical deterioration occurs when the practitioners present at the event did not participate in the planning and do not know the patient.
10. Every patient deserves to receive supportive palliative sedation treatment, the purpose of which is to prevent accompanying suffering, such as pain, anxiety and lack of sleep.
11. The treatment of patients already on ventilators in the intensive care unit should be reassessed daily with regard to its appropriateness, goals and proportionality. If there is evidence that a hospitalized patient only borderline fits the criteria, does not respond to prolonged initial treatment or deteriorates and does not respond to treatment, referral to palliative care should be considered. In the scenario of a rapid influx of additional patients - these discussions should not be postponed.
12. It is appropriate to repeatedly discuss the limitation of intensive care and the criteria for ventilation and intensive care, in accordance with the variable resources. The data may change depending on the number of patients, their medical condition,

the availability of ventilators and the place in the intensive care unit. The decision-making process is optimal when there is an ongoing assessment of the availability of resources.

13. ECMO support consumes more resources than normal intensive care hospitalization, and when the influx of patients is significantly larger than normal, such treatment should be reserved for specially selected cases with an expected quick rehab. ECMO treatment should be provided in units that have specialists experienced in this treatment, since their skill will require less personnel resources.
14. It is important to accumulate and exchange information in every possible way between the medical centers and the doctors. When working conditions allow it, following the state of emergency, it will be important to devote time and resources to investigating and monitoring the appearance of burnout and professional and moral distress of the medical teams.