

Recommendations on clinical ethics for Estonian hospitals for distribution of limited health care resources during the COVID-19 pandemic¹

As in the whole world, the spread of the COVID-19 pandemic can also bring about a situation in Estonia in the near future when necessary treatment cannot be provided to all patients. Because of morbidity and quarantine, the normal work of physicians, nurses and other hospital staff and the availability of personal protection equipment, pharmaceuticals and medical supplies can be essentially disrupted. Although both the government and hospitals take great efforts to increase the above-mentioned resources and to hinder the spread of COVID-19 through restrictions on people's movement, the shortage of hospital beds, intensive care places, ventilators, personal protection equipment and staff can cause a situation where more people need hospital treatment (including intensive care) than hospitals can offer.

To prepare health care providers and hospitals for taking difficult decisions, and the patients, their families and the whole society for understanding them, it is necessary to formulate the principles of ethical distribution of limited resources. Several European countries (e.g. Austria², Belgium³, Italy⁴, Germany⁵, the UK⁶, Switzerland⁷) have already worded the distribution principles of the resources of emergency medical services and intensive care during the COVID-19 pandemic. North Estonia Medical Centre and Tartu University Hospital, which bear the main responsibility in COVID-19 crisis management and supervising the medical staff in the northern and southern regions of Estonia, have asked to formulate the principles of action for taking ethically substantiated decisions, considering the patients' number and status, the staffing of hospitals and provision with medical supplies, equipment and pharmaceuticals.

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²Allokation intensivmedizinischer Ressourcen aus Anlass der Covid-19-Pandemie. (2020). Retrieved from https://www.oegari.at/web_files/cms_daten/covid-19_ressourcenallokation_gari-statement_v1.7_final_2020-03-7.pdf

³Meyfroidt, G., Vlieghe, E., Biston, P., Decker, K. De, Wittebole, X., Depuydt, P., ... Ledoux, D. (2020). Ethical principles concerning proportionality of critical care during the 2020 COVID-19 pandemic in Belgium: advice by the Belgian Society of Intensive care medicine. Retrieved from <https://www.hartcentrumhasselt.be/professioneel/nieuws-professioneel/ethical-principles-concerning-proportionality-of-critical-care-during-the-covid-19-pandemic-advice-by-the-belgian-society-of-ic-medicine>

⁴Vergano, M., Bertolini, G., Giannini, A., Mistraretti, G., & Petrini, F. (2020). Clinical Ethics Recommendations for the Allocation of Intensive Care Treatments in Exceptional, Resource-Limited Circumstances. Retrieved from <http://www.siaarti.it/SiteAssets/News/COVID19%20-%20documenti%20SIAARTI/SIAARTI%20-%20Covid-19%20-%20Clinical%20Ethics%20Reccomendations.pdf>

⁵Entscheidungen über die Zuteilung von Ressourcen in der Notfall- und der Intensivmedizin im Kontext der COVID-19-Pandemie. (2020). Retrieved from <https://www.divi.de/empfehlungen/publikationen/covid-19/1540-covid-19-ethik-empfehlung-v2/file>

⁶COVID-19: Ethical issues. (2020). Retrieved from <https://www.bma.org.uk/advice-and-support/covid-19/ethics/covid-19-ethical-issues>

⁷Swiss Academy of Medical Sciences. (2020). COVID-19 pandemic: triage for intensive-care treatment under resource scarcity. <https://doi.org/10.4414/smw.2020.20229>

PRINCIPLES OF ACTION

EQUAL TREATMENT OF PATIENTS

1. If the number of patients needing hospital treatment grows explosively, and the resources are extremely scarce, as many health care resources as possible are primarily directed to avoiding damage. This ensures the greatest benefit to the greatest number of people in the whole society.
2. The medicine system treats all patients equally regardless whether they have COVID-19 infection or some other severe illness.
3. Earlier arriving for treatment does not give any patient any advantage compared to those who come later.

DECISIONS CONCERNING INTENSIVE CARE DURING EXTREME SHORTAGE OF RESOURCES

4. At distribution of intensive care resources and taking decisions on treatment, primarily the prognosis for successful outcome of treatment and the future quality of life are taken into account, considering the patient's actual clinical status, accompanying diseases, general health status, other prognostically relevant indicators, and the patient's will.
5. Intensive care decisions are dynamic and can be reconsidered in time (see assessment criteria, clause 4) considering the patients' number and status, the staffing of the hospital and provision with medical supplies, equipment and pharmaceuticals.
6. **Conclusion.** If the COVID-19 pandemic broadens, and there are not enough resources for all patients, the beginning and continuation of intensive care is reconsidered (see assessment criteria, clause 4) with the arrival of each new patient (see clause 5), ensuring the equal treatment of new and earlier patients and patients with COVID-19 and patients with other illnesses (see clauses 2 and 3).
All decisions are taken collectively; they are substantiated, documented and communicated to patients' families.
7. If active treatment is interrupted, everything possible is done to relieve patients' sufferings and to ensure their humane and caring treatment.

PATIENTS AND THEIR FAMILIES

8. Health care providers do everything possible to identify the patient's will (current, earlier or presumable will) and to follow it, and to negotiate the treatment plan with the patient (or with the patient's family if the patient is lacking capacity to consent). If possible, patients should be asked about their will and preferences in advance, and the staff should negotiate with them what to do if the situation becomes critical.
9. Informing the patient's family is particularly necessary if a decision is taken to interrupt active treatment, and a plan of palliative treatment is drawn up, or if procedures regarding the end of life are performed. The staff of medical institutions understand that this means communicating difficult decisions and bad news, and their manner of communication is understanding, supportive and empathic.
10. Medical institutions take efforts that patients would not feel deserted during the ban on visiting because of the threat of infection and ensure that they could keep contact with their families (e.g. by using different means of information technology).
To ensure patients' mental wellbeing, psychologists, pastoral counsellors and/or clerics should be engaged.

HEALTH CARE WORKERS' PROTECTION AND COOPERATION BETWEEN THEM

11. To ensure patients' treatment, heightened attention is paid to protection of health care providers, as the success of fighting the pandemic depends on the upkeep of their health. The loss of each health care provider capable of work means a loss in the treatment of all patients.
12. Health care providers and hospitals all over Estonia support one another in the difficult situation and cooperate benevolently by sharing their knowledge, experience, practices and resources.

ETHICAL SUBSTANTIATION TO PRINCIPLES OF ACTION

Principles of medical ethics

The four significant principles of medical ethics – **autonomy, beneficence, nonmaleficence and justice**⁸ – are also topical during the shortage of resources caused by the COVID-19 pandemic.

In a normal situation, clinical medicine is **patient-centred**: the duty of the medical staff is to take care of each patient's wellbeing and health (the principle of beneficence), avoid causing harm (the principle of nonmaleficence), consider the patients' individual preferences and values (honouring of autonomy and human dignity), treat all patients equally and avoid discriminating anyone because of their age, gender, mental or physical disability (the principle of justice). Relying on the principles of beneficence, nonmaleficence and justice, the physician must take equal care of all the patient's life and health and avoid causing harm. Even in the normal situation, medical resources are limited, and any kind of treatment must be justified, as the waste of resources on useless treatment unfairly worsens the availability of necessary treatment to other patients⁹.

In the situation of a catastrophe, following the principle of nonmaleficence becomes particularly important. The principle of autonomy states that the physician must always honour the patient's will. Patients capable of decision-making can express their will directly. Information about the will of patients incapable of decision-making can be acquired from their families or earlier written statements.

Principles of catastrophe medicine ethics

In the situation of the pandemic, help can be found in **triage rules** formulated for catastrophe medicine and emergency medical services. A catastrophe is defined as a situation when ordinary life is severely disturbed, and the level of sufferings exceeds the community's ability to cope with them¹⁰. COVID-19 is an extensive global pandemic where, differently, for example, from natural disasters, help cannot usually be expected from other countries either; resources are scarce everywhere, or, because of the threat of infection, states have closed their borders.

⁸ Beauchamp, T. L., & Childress, J. F. (2019), 8th ed. Principles of Biomedical Ethics. Oxford University Press.

⁹ In practice, even in the normal situation most intensive care patients in Europe die after the decision not to start useless intensive care or to end applying intensive care procedures. Sprung CL, Ricou B, Hartog CS, et al (2019) Changes in End-of-Life Practices in European Intensive Care Units From 1999 to 2016. JAMA - J Am Med Assoc Oct 2:1–13. doi: 10.1001/jama.2019.14608

¹⁰ United Nations. (2009). 2009 UNISDR Terminology on Disaster Risk Reduction. Retrieved from: https://www.unisdr.org/files/7817_UNISDRTerminologyEnglish.pdf

An essential principle of catastrophe medicine is: if limited resources make it impossible ensure lifesaving treatment for all patients, it is necessary to act so that possibly great damage would be avoided, which also helps to ensure the greatest benefit for the largest number of people in the whole society. In the crisis situation where resources are scarce and it is impossible to give necessary help to all patients, focus shifts

from honouring the **individual values** (autonomy, privacy) of ordinary medicine to **collective values** (solidarity, reciprocity, safety) or from individual benefits to ensuring benefits for the community.

Individual benefits and benefits of the community

The patient-centred approach of clinical medicine is replaced with the community-centred approach oriented to public health where the central place belongs to **avoidance of damage, the principle of the greatest benefit and honest and transparent distribution of limited resources**. This does not mean that beneficence, patients' autonomy (including informed consent) and the principle of human dignity become inessential – they continue to be in effect. When the principles of medical ethics are interpreted in the ethical framework of catastrophe medicine, fair distribution of the existing resources (i.e. honest and transparent action, avoidance of discrimination), saving as many lives as possible (ensuring that the damage avoided would always be greater than the damage caused by action) and ensuring the protection of health care providers become increasingly essential¹¹.

In such situations, health care providers often face **moral dilemmas** where they must choose only between bad and even worse solutions. This situation is tragic in its essence, as no matter what decision is taken, each decision is accompanied by regret that is impossible to do everything that should have been done. Nonetheless, despite regret, the decision may be right. This means that every other decision would have been even worse. And doing nothing is also a decision which can cause more harm than doing something. Inevitably, such a moral predicament puts great psychic pressure on health care providers and causes stress. Just therefore, it is essential to give health care providers a moral compass that would help them to take the best possible decisions in the given situation.¹²

In the legal sense, this is a conflict of obligations where the decider has several contradictory obligations, and, in this situation, s/he has to fulfil the obligation that prevents the occurrence of damage to the greatest extent. An act which violates a legal obligation is not unlawful if the person is to perform several legal obligations simultaneously, and it is impossible to perform all of them, but the person does everything in his or her power to perform the obligation which is at least as important as the obligation violated against¹³. The Penal Code envisages a punishment for knowing refusal to provide assistance to a person who is in a life-threatening situation, but the conflict of obligations gives the physician the right to abandon using the means of intensive care for the treatment a patient with a more negative prognosis if the same means are needed for the treatment of another patient with a better prognosis.

¹¹ Swiss Academy of Medical Sciences 2020: 2

¹² World Health Organisation. (2016). Guidance for managing ethical issues in infectious disease outbreaks. Retrieved from <https://apps.who.int/iris/handle/10665/250580>

¹³ Penal Code § 30. Conflict of obligations.

Recommendable criteria for prioritising of patients in a catastrophe situation

Considering everything said above, the main criterion for prioritising patients in the conditions of limited resources is the prognosis for successful treatment and quality of their future life. This should be considered as carefully as possible, considering the patient's actual clinical status, accompanying diseases, general health status, other prognostically relevant indicators and the patient's will.¹⁴

In a catastrophe situation, priority is given to patients whose probability of survival and prognosis of recovery (after intensive care) are greater. The argument of efficiency of medical services may also play a role – rendering help to which patient has a quicker and stronger effect so that medical resources can be saved for the following patients.¹⁵

The principle of equal treatment requires that all patients are treated equally.¹⁶ Therefore, not only COVID-19 patients, but all patients needing treatment should be kept in mind when distributing resources in the state of emergency.

During the COVID-19 pandemic, the main criteria for starting or continuation of intensive care should be the medical outlook of successful treatment and a favourable prognosis for the quality of future life. Although accompanying and chronic diseases are known to be the main factor influencing the success of treatment, and higher age is statistically more frequently associated with accompanying and chronic diseases, like in an ordinary situation, patients should not be discriminated based on their age during the COVID-19 pandemic either.

In taking decisions about treatment, the person's gender, ethnicity or social status must not play any role. The ban on discrimination resulting from the framework of human rights does not lose its validity even in the state of emergency. During the crisis, special attention must be paid to communication with patients and their families.¹⁷

If possible, hospitals should consider engaging additional resources (e.g. psychologists, pastoral counsellors, clerics and other helpers).

¹⁴ See the recommendations of seven German speciality organisations about prioritising of patients: Entscheidungen über die Zuteilung von Ressourcen in der Notfall- und der Intensivmedizin im Kontext der COVID-19-Pandemie, 2020, p. 6. Scheme in the same document pp. 12–13). The Estonian Anaesthesiologists' Society is currently actively engaged in creating support for decision-making.

¹⁵ Swiss Academy of Medical Sciences 2020: 3.

¹⁶ Constitution of the Republic of Estonia, § 12.

¹⁷ See e.g. <https://www.vitaltalk.org/guides/covid-19-communication-skills/>

LITERATURE

Instructions of different countries

Austria

https://www.oegari.at/web_files/cms_daten/covid-19_ressourcenallokation_gari-statement_v1.7_final_2020-03-17.pdf

Belgium

Belgian Society of Intensive care medicine [https://aem-online.de/fileadmin/user_upload/COVID-19 -
_Belgian Society of Intensive Care Medicine -ethical final.pdf](https://aem-online.de/fileadmin/user_upload/COVID-19_-_Belgian_Society_of_Intensive_Care_Medicine_-_ethical_final.pdf)

The Netherlands – discussion against potential discrimination of disabled persons

<http://www.edf-feph.org/newsroom/news/updated-statement-ethical-medical-guidelines-covid-19-disability-inclusive-response-0>

Italy (translation into English)

<https://bioethics.miami.edu/assets/pdf/education/translation-of-siaarti-3-6-20.pdf>

Germany

Deutsche Interdisziplinäre Vereinigung für Intensiv- und Notfallmedizin (DIVI)

<https://www.divi.de/empfehlungen/publikationen/covid-19/1540-covid-19-ethik-empfehlung-v2/file>

The UK

<https://www.nice.org.uk/guidance/ng159/resources/covid19-rapid-guideline-critical-care-in-adults-pdf-66141848681413>

<https://pharmafield.co.uk/healthcare/nice-guidelines-on-active-management-of-patients-with-covid-19/>

<https://www.bmj.com/content/bmj/368/bmj.m1189.full.pdf>

<https://www.bma.org.uk/advice-and-support/covid-19/ethics/covid-19-ethical-issues>

USA, the Hastings Center

<https://www.thehastingscenter.org/ethicalframeworkcovid19/>

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