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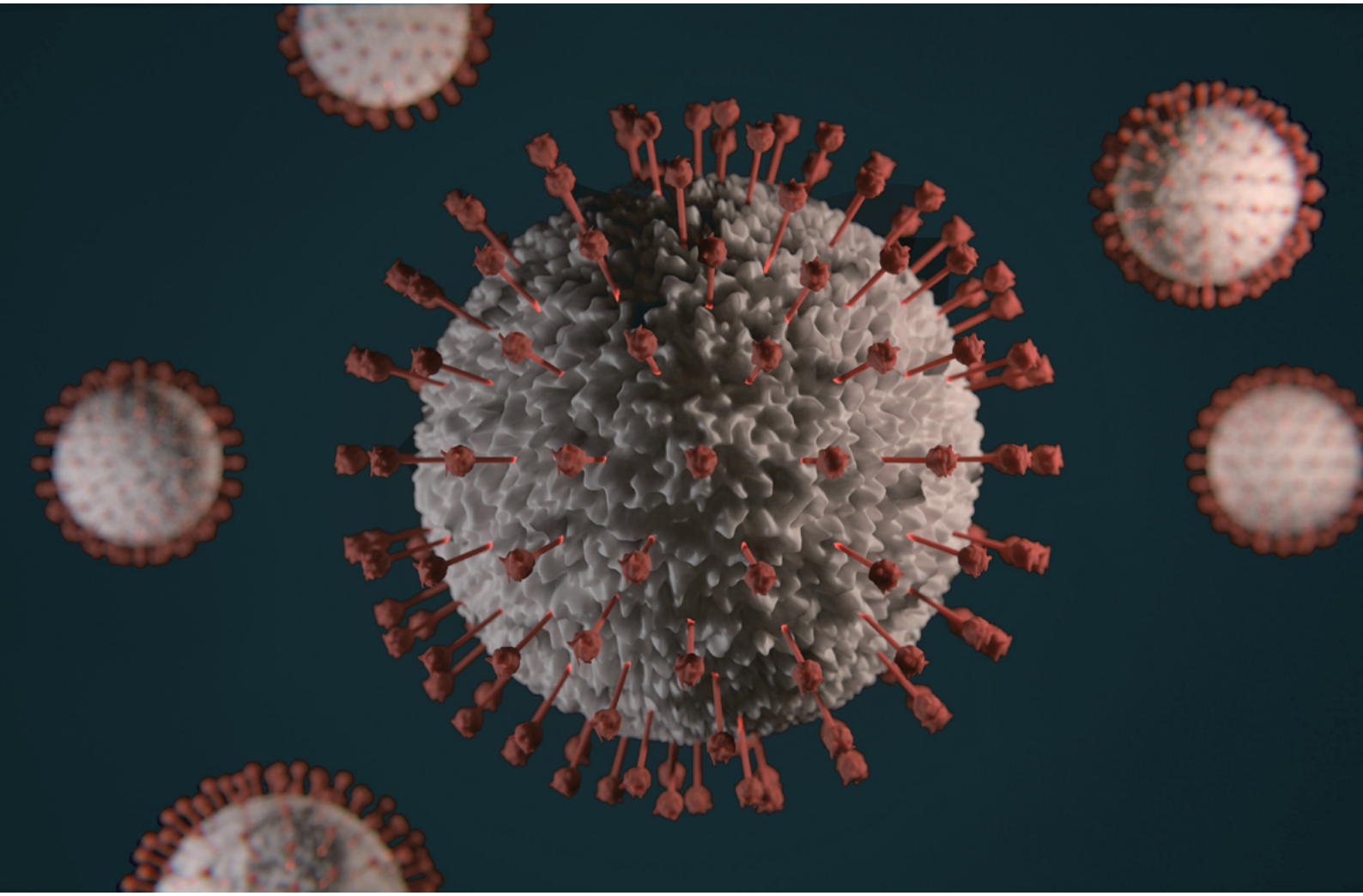
THE CASE FOR A CRITICAL RATIONAL APPROACH TO MEDICINE

Patient Autonomy in Crisis

Florian Chefai, Sophie Strobl, Dr. Michael Schmidt-Salomon, Dr. David Bardens, Prof. Dr. Dr. Eric Hilgendorf, Prof. Dr. Franz Josef Wetz



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The aim of any medical decision should be to ensure that patient autonomy is respected in accordance with the law. In the current corona pandemic, this not only requires a legally and ethically justifiable guideline for action on triage situations in order to avoid impermissible underuse. It also requires a critical and rational discussion of how overtreatment can be prevented at the end of life when intensive care measures conflict with the well-informed interest of the patient.

A worldwide increase in infections with the novel coronavirus SARS-CoV-2 and the associated respiratory disease COVID-19 has been observed. Governments are currently trying to reduce the number of new infections with drastic measures such as mandatory social distancing and school closures in order to prevent the threat of overloading health care systems. In some regions of Italy and France, however, the situation had already deteriorated to such an extent that the number of available intensive care beds and ventilators was no longer sufficient to provide all acutely ill patients with life-saving treatment.

In the worst case, Germany could also be faced with a shortage of ventilators and qualified personnel as well as supply bottlenecks for necessary medications. Considering the presently declining infection rate it is unlikely that this scenario will eventuate. Despite substantial efforts to expand existing capacities, it can however not be completely ruled out that, in the event of a serious deterioration of the situation, there will be too many patients with too few intensive care resources available to help them. If this should occur, it would have to be decided how and for whom life-saving treatment should be prioritized in a process known as "triage".

Such dramatic decisions about life and death not only represent an enormous psychological burden for patients, relatives and doctors, they are also a legal and ethical challenge.

Putting Patient Autonomy First

In the discussion on triage scenarios[1] so far a decisive point has receded into the background: It is not the unconditional saving or prolongation of life that should be the primary goal of medical action. Rather, the aim should be to provide medical care that corresponds to the will of the patients and contributes to their well-being. If there is no realistic prospect of a life outside the intensive care unit or if the dying process has already begun, it is essential to refrain from strenuous treatments that would only cause additional suffering for the patients.

In acute emergency situations, however, careful medical history-taking and patient counselling cannot always take place. Likewise, it is not assured that the patient is able to give consent before or during treatment. It is therefore advisable to document one's own will in a Patient Decree before such a situation arises to preclude over- or undertreatment. In order for the Patient Decree to serve as a implementable guide, it must be worded as clearly and unambiguously as possible.[2] Otherwise, there is a risk that relatives, legal representatives or physicians will make a decision not in accordance the patient's wishes. Previous experience indicates that proxy decisions lead comparatively often to artificial ventilation and intensive care treatment at the end of life.[3]

The elderly in particular represent the high-risk group for a severe progression of COVID-19 and have statistically poorer chances of success when undergoing invasive ventilation. They should therefore deal sooner rather than later with the question of whether and how they would like to be treated in the event of an acute deterioration in their state of health. With advancing age, many of them prefer palliative medical care to artificial ventilation and potential resuscitation measures. Especially in cases where a return to self-determined everyday life would be highly unlikely and the quality of life suffers in accordance with their own idea of dignity, older people would often decide against critical care therapy. Even if this were to result in their certain death, they have the unassailable right to refuse treatment at any time.

In this respect, the clinical-ethical recommendations issued by the specialist medical societies have been improved in their updated version, which now clarifies that pre-existing conditions, age, social aspects and disabilities are not general exclusion criteria for intensive care, but are to be considered solely in terms of their actual significance for the clinical success of a therapy. It further states: "Patients who refuse intensive care treatment are not subjected to intensive care treatment. This can be done on the basis of the present, previously recorded (e.g. in a Patient Decree), previously orally expressed or presumed will. The will can be asserted by the patient himself or through his legal representative."[4]

In order for the patient's will to be properly asserted, a joint agreement between patient and doctor is necessary. The decisive keyword here is Shared Decision Making, which empowers the patient to decide on the further course of treatment. Active patient participation, however, frequently encounters difficulties in everyday clinical practice, as it represents a departure from the traditional doctor-patient relationship.

Instead of involving the patient as a partner in the choice of treatment, this relationship is in many cases paternalistic and directive. Even so, the advantages of a participatory involvement of the patient in therapy decisions have now been sufficiently proven: International reviews confirm that patients are more informed, have more realistic expectations of treatment and feel more aware of their wishes and fears.[5]

Ventilators Are No Panacea

A self-determined decision for or against a particular medical intervention requires knowledge of its chances of success as well as its risks. In the corona crisis, this concerns primarily the usefulness and adequacy of intensive medical treatment. Due to the novelty of COVID-19, however, the research data and experience in the management of treatments necessary to be able provide patients with optimal care are still lacking. This makes it difficult to accurately assess the chances of success and thus the medical usefulness of a therapy.

There is now evidence, however, that invasive ventilation in particular is anything but a panacea: In general, the chances of survival for intubated patients are between 50 and 70 percent.[6] However, they correlate negatively with patient age and duration of ventilation[7], the latter being significantly longer than usual in COVID-19 cases.[8]

Possible complications not only include additional lung infections, reduced cardiac output and impairment of liver and kidney function, but also damage to the lungs due to ventilation pressure or high oxygen concentration of the supplied air. In addition, there is the risk of organ damage, muscle atrophy due to prolonged immobilization[9] and psychological consequences such as post-traumatic stress disorder (PTSD).[10]

In many cases, the recovery process is long and difficult. Even after being discharged from the hospital, patients often depend on the help of others to cope with everyday life.[11]

In the course of the current corona pandemic, much higher mortality rates of mechanically ventilated patients are being recorded than in the general case, the reasons for which are not yet fully understood.[12,13] According to several studies and official reports, only about 10 to 30 percent of COVID-19 patients survive invasive mechanical ventilation.[14,15] Particularly in older patients, the chances of survival are alarmingly low: In New York, 97.2 percent of over-65-year-olds who received invasive ventilation died.[16] Lung specialists therefore increasingly recommend reviewing current treatment practice.[17] They suggest that, before switching to invasive ventilation, the full range of available non-invasive treatment methods should be exhausted in order to avoid further lung damage and possibly increase patients' chances of survival.

Despite all this, the *German Society for Anaesthesiology and Intensive Care Medicine* sees no reason to reconsider its current treatment practice. When asked by the TV current affairs programme *Monitor* how high the percentage of patients who died after intubation is in Germany, they state that this is "entirely irrelevant, since it is not the intubation as such that is significant, but the severity of the patient's illness that led to the need for intubation and ventilation".[18]

It is doubtful whether this is really the case. It is true that treatment must be based on the severity of the patient's illness. However, this does not mean that the mortality rate is "entirely irrelevant". After all, it is crucial to find out how many patients benefited from invasive mechanical ventilation and which factors had a bearing on this. Only then can the usefulness of a therapy and thus its individual appropriateness be factually assessed. If it turns out that other treatment methods lead to better results, they should be preferred to invasive mechanical ventilation. On the other hand, failing to even consider an adjustment of the current course of action endangers the patients' well-being.

The Triumph of Critical Rational Medicine

Rarely before has it been so obvious how much the well-being of patients depends on the scientific expertise of their doctors. After all, medical decisions can only be made in a responsible manner if they take into account the current state of research and can be judged against reality. Diagnoses and therapies are based on hypotheses that must be fundamentally verifiable and falsifiable.[19] Especially in times of crisis, the advantages of a critical rational medicine which continuously scrutinizes and improves its treatment practice become apparent. This requires not only the ability to clearly state existing uncertainties in the current pandemic, but also openness for alternative problem solutions. After all, the strength of science lies above all in its willingness to learn from its mistakes.

Notes

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[12] M. Stobbe: Why Some Doctors Are Now Moving Away From Ventilator Treatments for Coronavirus Patients, Time, https://time.com/5818547/ventilators-coronavirus/ (April 9, 2020, accessed: April 26, 2020).

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