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Withdrawal of intensive care during times of severe scarcity: Triage during a pandemic only upon arrival or with the inclusion of patients who are already under treatment?

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Abstract

Many countries have adopted new triage recommendations for use in the event that intensive care beds become scarce during the COVID-19 pandemic. In addition to establishing the exact criteria regarding whether treatment for a newly arriving patient shows a sufficient likelihood of success, it is also necessary to ask whether patients already undergoing treatment whose prospects are low should be moved into palliative care if new patients with better prospects arrive. This question has led to divergent ethical guidelines. This paper explores the distinction between withholding and withdrawing medical treatment during times of scarcity. As a first central point, the paper argues that a revival of the ethical distinction between doing and allowing would have a revisionary impact on cases of voluntary treatment withdrawal. A second systematic focus lies in the concern that withdrawal due to scarcity might be considered a physical transgression and therefore more problematic than not treating someone in the first place. In light of the persistent disagreement, especially concerning the second issue, the paper concludes with two pragmatic proposals for how to handle the ethical uncertainty: (1) triage protocols should explicitly require that intensive care attempts are designed as time-limited trials based on specified treatment goals, and this intent should be documented very clearly at the beginning of each treatment; and (2) lower survival prospects can be accepted for treatments that have already begun, compared with the respective triage rules for the initial access of patients to intensive care.

KEYWORDS

allocation, allowing, doing, pandemic, scarcity, triage, withdrawing, withholding

1 | INTRODUCTION

The threat of scarcity situations in intensive care units (ICUs) during the spread of COVID-19 has raised difficult ethical questions regarding prioritization. Medical ethicists in various countries and regions have debated the development and application of triage rules in the event of ventilators in ICUs becoming scarce. Among the various issues raised, there have been major concerns about extending triage evaluations to patients who are already under treatment. The concern is that it might be seriously unethical to 'switch off' current patients as

soon as newer patients with better survival prospects arrive.[1] It has frequently been observed that withholding and withdrawing treatment are considered to be morally equivalent in many ethical guidelines, while physicians often feel that there is a difference.[2]

Given this general picture, it is unsurprising that the issue has re-emerged forcefully during the onset of the COVID-19 pandemic, during which medical organizations in many countries have put together guidelines for allocating ventilators in the event of their scarcity. Opinions on how to carry out initial-access triage as well as on the re-assessment of current patients are divided. For example, Italian intensive care physicians have adopted a triage guideline that permits an entirely symmetrical approach to refusal and withdrawal decisions, in the sense of including those already under treatment in continuous triage re-evaluations along with all new arrivals using the same criteria.[3] Similarly, the British Medical Association recommends withdrawal if the condition of a patient worsens to the extent that he or she would not have been admitted to ICU treatment had this condition existed prior to admission.[4]

The German National Ethics Council has adopted a different approach and highlighted that—in contrast to withholding—withdrawing has to be viewed as formally illegal,[5] presumably on the grounds that the involuntary withdrawal of a non-futile treatment constitutes a form of killing.[6] Regulators and ethicists in other jurisdictions—including those in which ethicists recommend withdrawals under certain circumstances—are confronted with similar legal situations.[7]

Other organizations, such as the Swiss organization of intensive care physicians and a group of German medical organizations (including the society for intensive care and the society for medical ethics), have chosen a hybrid approach, with asymmetrical conditions for withholding and withdrawing treatment while still recommending withdrawal in some cases.[8] For example, for a potential situation in which capacities are starting to become limited ('stage A'), the Swiss guideline recommends withholding ICU treatment for patients with certain conditions of either the heart, lung or liver, but recommends withdrawal only for patients with significant failure of at least three organs.

2 | THE OPTIONS

In cases of scarcity in ICUs, a first step should usually be to try to relocate patients to other hospitals where resources remain available. If this is no longer possible, physicians are presented with a limited number of ethically defensible options.[9] One option would be to operate based on a first-come-first-served principle. The limited resources would be given to whoever has arrived first and whose treatment does not appear to be futile. It seems that withdrawal of treatment would not be an issue, because only those whose further treatment had become futile would be moved from ICUs into palliative care. This would be a termination of (curative) treatment due to futility rather than a withdrawal. Even though the first-come-first-served principle might confer an advantage on those who live closer to hospitals and become sick during times of lower demand, it could be argued that these aspects are sufficiently accidental to make the principle appear like a (natural) lottery. Lotteries give everyone an equal chance, which is in and of itself a just principle. While a lottery solution can naturally frustrate numerous other justice concerns, proponents might argue that these other justice concerns are too contradictory to generate a clear-cut alternative solution to the problem, so that it would be better to resort to a chance mechanism, which is at least formally impartial.[10]

In order to avoid at least the worst counterintuitive implications of the first-come-first-served principle,[11] authors who defend this approach usually emphasize that only patients who stand to benefit from the treatment should be admitted to (or remain under) treatment. A well-known example of such an endorsement of the

[1]For example, in our jurisdiction, this led to a diverse opinions in a debate in an online meeting of 100 clinical ethicists on March 19. The discussion turned on whether to withdraw curative treatment of current patients with low, but still plausible, prospects in case a patient with better prospects arrived and there were not enough ventilators for all.

[2]Ursin, L. Ø. (2019). Withholding and withdrawing life-sustaining treatment: Ethically equivalent? *American Journal of Bioethics*, *19*(3), 10–20.

[3]Italian Society for Anesthesia, Analgesia, Emergency and Intensive Care Medicine (SIAARTI). (2020). Clinical ethics for the allocation of intensive care treatments. Retrieved from http://www.siaarti.it/SiteAssets/News/COVID19%20-%20document i%20SIAARTI/SIAARTI%20-%20Covid-19%20-%20Clinical%20Ethics%20Reccomen dations.pdf (Accessed May 14, 2020).

[4]British Medical Association (BMA). (2020). COVID-19 – Ethical issues. A guidance note. Retrieved from https://www.bma.org.uk/media/2360/bma-covid-19-ethics-guida nce-april-2020.pdf (Accessed May 14, 2020).

[5]German National Ethics Council. (2020). Solidarity and responsibility during the corona virus crisis. Retrieved from https://www.ethikrat.org/en/press-releases/2020/solidarity -and-responsibility-during-the-coronavirus-crisis/ (Accessed May 14, 2020).

[6]Unfortunately, the statement by the Council is not fully explicit regarding exactly why and under which conditions withdrawal is to be viewed as illegal. Most likely, the background is a 2012 decision by the Federal Criminal Court, which ruled that switching off a ventilator (with presumed consent) in a terminal phase does not constitute a homicide—thereby implying that switching it off under any other circumstances could in fact be homicide.

[7]Cameron, J., Savulescu, J., & Wilkinson, D. (2020). Is withdrawing treatment really more problematic than withholding treatment? *Journal of Medical Ethics*. Retrieved from http://dx.doi.org/10.1136/medethics-2020-106330 (Accessed Oct 1, 2020); Cohen, I. G., Crespo, A. M., & White, D. B. (2020). Potential legal liability for withdrawing or withholding ventilators during COVID-19. Assessing the risks and identifying needed reforms. *JAMA*, *323*(19), 1901–1902; Eastman, N., Philips, B., & Rhodes, A. (2010). Triaging in adult critical care in the event of overwhelming need. *Intensive Care Medicine*, *36*(6), 1076–1082; Hurford, J. E. (2020). The BMA COVID-19 ethical guidance. A legal analysis. *New Bioethics*, *26*(2), 176–189; Liddell, K., Skipek, J. M., Palmer, S., Martin, S., Anderson, J., & Sagar, A. (2020). Who gets the ventilator? Important legal rights in a pandemic. *Journal of Medical Ethics*, *46*, 421–426.

[8]German Interdisciplinary Association of Intensive Care and Emergency Medicine (DIVI) et al. (2020). Decisions on the allocation of intensive care resources in the context of the COVID-19 pandemic. Version 2. *Medizinische Klinik – Intensivmedizin und Notfallmedizin*. Retrieved from https://doi.org/10.1007/s00063-020-00709-9 (Accessed Oct 1, 2020); Swiss Academy of Medical Sciences (SAMW). (2020). COVID-19 pandemic: Triage for intensive-care treatment under resource scarcity. *Swiss Medical Weekly*. Retrieved from https://doi.org/10.4414/smw.2020.20229 (Accessed May 14, 2020).

[9]The possibility of giving priority to members of the medical staff in order to ensure proper medical care in the more immediate future will not be the central concern here.

[10]Brecher, B. (2008). Rational rationing? *Clinical Ethics*, *3*(2), 53–54.

[11]Most obviously, the first-come-first-served principle can lead to a situation in which an urgent patient with very low prospects would have to be given an ICU bed at the expense of an equally urgent patient with much better prospects. It has also been argued, though, that the principle would be worse for patients with disabilities, in particular in comparison with a protocol that aims at saving as many lives as possible; see Wassermann, D., Persad, G., & Millum, J. (2020). Setting priorities fairly in response to Covid-19: Identifying overlapping consensus and reasonable disagreement. *Journal of Law and The Biosciences*, *7*(1), 1–12.

principle has been put forth by the Bioethics Task Force of the American Thoracic Society (ATS).[12] However, commentators have highlighted that what 'remains to be done' regarding this statement is to articulate the precise medical conditions under which this approach sees sufficient chances of benefit so that a patient can (a) be admitted to or (b) remain in the ICU.[13] In other words, it can be argued that treatment withdrawal is an issue for the first-come-first-served principle after all, because it is by no means obvious under what exact conditions the beginning or—more relevant here—the continuation of a treatment has to be viewed as futile. The answer to these two questions will therefore determine the extent to which any actually defended version of the first-come-first-served principle will prove to be a narrow version of a benefit-oriented allocation rule. The obvious alternative is thus to use benefit-oriented triage rules right from the start and avoid the first-come-first-served principle altogether, or alternatively to use it only as a tie-breaker between patients with more or less equal chances, for example as recommended by the British Medical Association, the Belgian Society of Intensive Care Medicine, and the Dutch triage framework.[14]

Benefit-oriented triage rules can in principle be applied to new arrivals only, but they can also form the basis of continuous re-evaluations of those already undergoing treatment. It is often claimed that triage means that those who have the highest chances of benefiting should be given treatment priority. However, there are in fact various other interpretations of beneficence based on patients' prospects, as follows.

(i) A very narrow interpretation of the benefit requirement—to which even proponents of the first-come-first-served principle usually subscribe—would merely claim that patients must have a sufficiently high chance of benefiting from the treatment, for example of surviving the treatment for a significant amount of time. An example for this option would be the aforementioned ATS framework, which was criticized on the grounds that it was not sufficiently specific about the exact clinical conditions under which physicians should expect such a benefit.

(ii) A more common interpretation of the benefit requirement is the view that patients should be treated in the order of their survival prospects, regardless of how long their lives will last after treatment. It can be argued that this version contributes to saving as many lives as possible, without disadvantaging the elderly or those whose life expectancies are lower for other reasons. Rescuing as many lives as possible is the explicit aim of the Swiss guideline. The revised version of the German framework also has this aim.

(iii) An even more outcome-oriented interpretation demands that patients be treated in an order designed to maximize extra life-years across the entire patient population. Such an approach implies, for example, that if all other factors (e.g., urgency) are equal, then those who are young and strong should be treated first, because (irrespective of the badness of dying young) doing so will usually generate a larger number of extra life-years. This is an option that has been kept open in Italy, where age limits for ventilator treatments are explicitly not ruled out, and priority for urgent patients with the highest life expectancy is explicitly recommended.[15] While the Italian framework makes no further statements about the possible upper age limit, and thereby allows even for very low age limits, the Swiss framework adopts a somewhat more moderate approach and explicitly recommends an age of over 85 as a criterion for withholding ICU treatment during advanced stages of scarcity.[16] Given this age limit, the Swiss guideline can be seen as featuring at least a partial adoption of option (iii), in addition to its explicit endorsement of option (ii).

The Italian endorsement of option (iii) has been criticized from the beginning, especially regarding its rather unrestricted acceptance of age limits.[17] One commentary argues as follows: impersonal maximization of life-years across the entire pool of patients is not a standard interpretation of traditional triage rules, as they were applied during times of war in the past. In contrast to the principle of maximizing the number of survivors, this approach can require giving priority to significantly less urgent patients (if they are younger). Furthermore, maximizing extra life-years, as opposed to maximizing the number of individual survivors, is a principle that is harder to justify in non-utilitarian ethical frameworks such as contractualism.[18]

[12]American Thoracic Society (ATS). (1997). Fair allocation of intensive care unit resources. *American Journal of Respiratory and Critical Care Medicine*, *156*, 1282–1301. It has also been argued that first-come-first-served produces better outcomes than poor-quality triage predictors; see Kanter, R. K. (2015). Would triage predictors perform better than first-come, first-served in pandemic ventilator allocation? *CHEST*, *147*(1), 102–108. Jim Childress has argued that first-come-first-served is at least better than the use of social criteria; see Childress, J. (1970). Who shall live when not all can live? *Soundings*, *53*(4), 339–355.

[13]Fleck, L. M., & Murphy, T. F. (2018). First come, first served in the intensive care unit. Always? *Cambridge Quarterly of Healthcare Ethics*, *27*(1), *52–61*.

[14]BMA, op. cit. note 4; Belgian Society of Intensive Care Medicine (SIZ). (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 http://www.siz.be/wp-content/uploads/COVID_19_ethical_E_rev3.pdf (Accessed Oct 1, 2020); Verweij, M., van de Vathorst, S., Schermer, M., Willems, D., & de Vries, M. (2020). Ethical advice for an intensive care triage protocol in the COVID-19 pandemic: Lessons learned from the Netherlands. *Public Health Ethics*. Retrieved from https://doi.org/10.1093/phe/phaa027 (Oct 1, 2020).

[15]SIAARTI, op. cit. note 3.

[16]SAMW, op. cit. note 8.

[17]Craxì, L., Vergano, M., Savulescu, J., & Wilkinson, D. (2020). Rationing in a pandemic: Lessons from Italy. *Asian Bioethics Review*, *12*(3), 325–330.

[18]Lübbe, W. (2020). Corona triage. A commentary on the triage recommendations by Italian SIAATI medicals regarding the corona crisis. Retrieved from https://verfassungsblog.de/corona-triage-2/ (Accessed May 14, 2020). See also Baker, R., & Strosberg, M. (1992). Triage and equality: An historical reassessment of utilitarian analyses of triage. *Kenney Institute of Ethics Journal 2*(2), 103–123; Persad, G. C. (2020). A conceptual framework for clearer ethical discussions about Covid-19 response. *American Journal of Bioethics*, *20*(7), 98–101; Verweij, M. (2009). Moral principles for allocating scarce medical resources in an influenza pandemic. *Journal of Bioethical Inquiry*, *6*(2), 159–169.

As previously mentioned, options (i)–(iii) for spelling out benefit-oriented triage rules can in principle be applied only to patients seeking initial access, or also to current patients whose situation has deteriorated. The thinking behind applying triage rules only to new arrivals is clearly that withdrawing life support should be seen as morally worse than immediately refusing it. Can this position be defended? Or are there better arguments for treating the two situations symmetrically?

3 | LOYALTY TO THE PATIENT AND DISTRIBUTIVE JUSTICE

One option for arguing in favour of a moral asymmetry between initial and continued access to intensive care would be to insist that physicians have a special duty of loyalty to patients who have already been given scarce, life-saving resources. Sometimes it is also argued that physicians should advocate for their primary patients when difficult circumstances arise. Taking patients off ventilators and moving them into palliative care as soon as 'better' patients, with better survival chances, arrive might be a violation of the special bond of unconditional trust that is supposed to exist between physicians and their patients. Usually, we do not believe that physicians should make vital treatment efforts contingent on factors that are unrelated to their primary patient. This might be an immediate worry of physicians who have already invested effort in the treatment of a patient and have established a psychological relationship with this person.

However, proponents of triage re-evaluations in scarcity situations can insist that the procedure serves the purpose of rescuing a larger number of lives overall, and that distributing scarce resources to the benefit of the many is a legitimate ethical concern. Moreover, scarcity situations during a pandemic are not the only scenarios in which loyalty to the individual patient finds its ethical limit in distributive justice concerns. For example, physicians in charge of a brain-dead organ donor cannot, without further ado, simply give the organs to another of their own patients. In most jurisdictions there are complex point systems that are supposed to ensure that organs are distributed in accordance with justice among the patients on the waiting list. Physicians have to refrain from doing everything possible in favour of one of their own patients when organs are the scarce vital resource in question. Moreover, in other, less vital, contexts, physicians constantly balance their duties to different patients, for example when limiting the time of an appointment in order to see the next patient.[19]

It is therefore hard to believe that the duty of loyalty to the individual patient can be seen as a decisive ground for the rejection of triage re-evaluations and potential treatment withdrawals during a pandemic.[20] Nonetheless, it has to be acknowledged that the duty to care for one's primary patients and the duty of assuring justice among a larger population of patients can give rise to a conflict of interests. In order to avoid such conflicts of interest and to facilitate the work of physicians under conditions of scarcity, triage re-evaluations, if performed at all, should not be placed solely in the hands of individual primary physicians who are currently responsible for the patient in question.[21] Requiring a larger team, or even a team that is entirely independent from the primary physician of the patients in question, is a good way of acknowledging that justice during a pandemic is a general public health concern.

4 | THE DOING–ALLOWING DISTINCTION AND VOLUNTARY TREATMENT WITHDRAWALS

A further argument in favour of a moral asymmetry between withholding and withdrawing treatment might be that the latter is an interruption of an already ongoing, causal chain of events aimed at prolonging life. While refusing treatment in the first place would merely be an instance of letting die, the withdrawal option resembles a problematic terminal intervention. The doing–allowing distinction is a controversial, but also potent, explanatory resource in ethics. If taking someone off a ventilator against their wishes constitutes a problematic terminal intervention, then trying to argue that triage during treatment is permissible might be a non-starter.

However, it has often been pointed out that the doing–allowing distinction can have peculiar implications. In particular, it should be noted that it would lead to a tension with our ordinary views about the moral status of voluntary treatment withdrawals. The point is that there has been a widespread, international consensus among ethicists that a physician who adheres to a patient's wishes by withdrawing a treatment does not kill that person.[22] This is confirmed even by authors who, in general, consider the doing–allowing distinction to be morally relevant.[23] Instead, withdrawal is merely taken as the shortening of unwanted suffering. The standard view on this matter says that even apparently active interventions, such as pressing a button to switch off a life-support system or pulling out a

[19]This example is owed to an exchange with Joseph Millum (NIH).

[20]Hope, T., McMillan, J., & Hill, E. (2012). Intensive care triage: Priority should be independent of whether patients are already receiving intensive care. *Bioethics*, *26*(5), 257–263.

[21]Many of the newly drafted ethical frameworks suggest this, but the exact extent to which triage re-evaluations should be taken out of the hands of primary physicians is controversial: the previously mentioned Italian framework says merely that 'a second opinion … may be useful when dealing with particularly difficult or distressing cases' (SIAARTI, op. cit. note 3, p. 5), while the abovementioned framework from the German medical associations says that there should, if possible, be two intensive care physicians, *including* the primary and secondary physician of the patient; and, if possible, nurses; and, if required, members of other disciplines such as medical ethics (DIVI, op. cit. note 8, p. 5). In contrast, the Pittsburg framework calls for a special medical triage officer and, if possible, a nurse and an administrator for documentation; see White, D. B., Katz, M., Luce, J., & Lo, B. (2020). Allocation of scarce critical care resources during a public health emergency. Retrieved from https://ccm.pitt.edu/sites/default/files/UnivPittsburgh_ModelHospitalResourcePolicy_2020_04_15.pdf (Accessed May 11, 2020).

[22]Emanuel, E., Persad, G., Upshur, R., Thome, B., Parker, M., Glickman, A., … Phillips, J. P. (2020). Fair allocation of scarce medical resources in the time of Covid-19. *New England Journal of Medicine*, *382*(21), 2049–2055.

[23]Ursin, op. cit. note 2.

feeding tube, are merely a way of returning to a natural course of events.[24]

Of course, there is a big difference between patients who voluntarily refuse further treatment and those who want to be cured of COVID-19. Nonetheless, the standard view on voluntary treatment withdrawal for competent patients is not simply that voluntariness is decisive for permissibility. The conventional argument is also based on the idea that the termination of an intervention is merely a return to a natural course of events. The potency of this thought is reflected in the large number of jurisdictions that allow voluntary treatment withdrawal while criminalizing voluntary, active euthanasia (killing on request). Voluntariness cannot be the decisive factor in such jurisdictions; instead, it is the particular interpretation of the doing–allowing distinction, according to which withdrawing treatment is a return to a natural course of events rather than a problematic terminal intervention.[25]

5 | WITHDRAWAL DUE TO SCARCITY—A PHYSICAL TRANSGRESSION?

Is it possible to find a different justification for the alleged asymmetry between treatment refusal and treatment withdrawal during situations of scarcity? A potential candidate for such reasoning is indeed the involuntariness of the necessary physical intervention. The idea could be that any measures performed on a patient's body, whether planned or ongoing, require that person's informed consent.[26] In cases of voluntary refusal or withdrawal, consent would eliminate any charge of wrongdoing.[27] In settings of scarcity during a pandemic, the lack of consent to terminate the curative treatment would certainly contribute to many physicians' concerns about withdrawal.

The worry becomes more apparent when considering the same situation under ordinary conditions without scarcity. Withdrawing treatment from a patient who has not consented to this, even if they have only low prospects of survival, would be an illegitimate choice. Moreover, in principle it can be argued that it constitutes killing, rather than letting the person die or returning to a natural course of events.[28]

Many jurisdictions do not seem to have explicit and therefore reliable legal resources to distinguish between withdrawal due to scarcity and withdrawal for reasons that are illegitimate. In these jurisdictions, physicians considering withdrawal due to scarcity, when there are low survival prospects, are faced with the problem that this might be considered a criminal offense[29] and that they could at most hope to be excused. The legitimate public health concern of helping as many as possible within the boundaries of justice is thereby delegated to individual physicians at their own personal risk of facing legal charges.

At the same time, it is by no means obvious that patients already under treatment in a setting of scarcity have the same moral claim on the respective medical resources as they would normally have. In settings of scarcity, the use of resources can, after all, come at the cost of other patients' lives. A fully worked out position on this issue might partly depend on whether the ventilator has to be viewed as part of the patient's body, as is arguably the case for pacemakers.[30] A further question might be whether a ventilator has to be viewed as functioning autonomously, or whether its proper functioning requires constant attendance by medical staff.

To summarize, there are very good reasons for believing that initial treatment refusal and treatment withdrawal should be treated symmetrically, not only when there is voluntary rejection by a patient, but also during cases of severe scarcity when physicians are operating under a triage framework. Nonetheless, there does seem to be room for arguments to the contrary, especially for those based on the claim that withdrawing treatment without the patient's consent is a physical transgression—as it would be under circumstances without scarcity.

6 | PRAGMATIC OPTIONS FOR HANDLING A POTENTIAL MORAL ASYMMETRY

A general problem—especially during an acute crisis—is that these ethical controversies will not be resolved quickly. Especially in jurisdictions that face the additional concern that courts could consider withdrawal to be a form of homicide, arguments in favour of a potential asymmetry between withholding and withdrawing should be taken seriously, despite the fact that many medical ethics societies and researchers explicitly deny that there is an ethically relevant difference.[31] This raises the question of pragmatic ways of handling the remaining normative uncertainties. Two central issues seem to be that withdrawal due to scarcity can occur without consent, and that it can occur under controversial assumptions about the appropriate form of benefit for which a triage framework should aim (in the sense

[24]This kind of case is a central reason why many commentators nowadays try to avoid the active–passive terminology.

[25]A further case in which categorizing treatment withdrawal as a problematic terminal intervention would have a revisionary impact, at least in certain jurisdictions, is that of patients without advance directives who are in a persistent, vegetative state. The withdrawal of treatment could become a major moral problem, and the number of such patients on temporally unlimited life-support could increase rapidly.

[26]Gedge, E., Giacomini, M., & Cook, D. (2007). Withholding and withdrawing life support in critical care settings: Ethical issues concerning consent. *Journal of Medical Ethics*, *33*(4), 215–218.

[27]Persistent vegetative states would remain an issue, but such states seem to require a further discussion about the exact character of medical futility in any case.

[28]McMahan, J. (1993). Killing, letting die, and withdrawing aid. *Ethics*, *103*(2), 250–279.

[29]Cameron et al., op. cit. note 7; Cohen et al., op. cit. note 7; Eastman et al., op. cit. note 7; German National Ethics Council, op. cit. note 5, Hurford, op. cit. note 7; Liddell et al., op. cit. note 7.

[30]Merkel, R. (2016). Killing or letting die? Proposal of a (somewhat) new answer to a perennial question. *Journal of Medical Ethics*, *42*(6), 353–360.

[31]American Medical Association (AMA). (2020). *AMA code of medical ethics*. Retrieved from https://www.ama-assn.org/delivering-care/ama-principles-medical-ethics (Accessed Oct 1, 2020); BMA, op. cit. note 4; Emanuel et al., op. cit. note 21.

of options i–iii). Potential solutions to these issues will now be suggested.

One strategy would be a more widespread and explicit endorsement of the concept of time-limited trials in triage guidelines. In a time-limited trial, ICU treatment would only be extended if certain, clearly specified treatment goals were reached within a reasonable amount of time.[32] A continuation of treatment would then require a clear, further decision and an active revision of the previous plan.[33] In a sense, this would turn situations of potential withdrawal of treatment into refusals to start a further treatment.

Although the concept of a time-limited trial has become common in the English-speaking world,[34] many of the recently drafted ethics frameworks for the pandemic make no appeal to it. Time-limited trials do, however, have clear advantages. Proponents recommend time-limited trials especially in cases where it is unclear whether a patient will benefit from treatment or continued treatment. Repeatedly extending a treatment of uncertain benefit can be seen as prolonging the patient's suffering without foreseeable benefit. Setting a realistic time limit on the attempt to achieve certainty about the patient's prospects can be a plausible way of terminating unethical extensions of suffering in the absence of clear benefit.

Documenting the limitation very explicitly at the beginning also has clear advantages. In particular, it avoids unclear boundaries between treatments that began before and during the onset of a period of scarcity. It also settles the conditions of the treatment at the beginning rather than at the end, when caregivers and relatives are exposed to greater emotional strain. Moreover, advance documentation might help to avoid preventive delays of treatment for some patients, which can occur if physicians are worried that an equally urgent patient with better prospects will arrive soon.

Moreover, while time-limited trials are usually suggested for ordinary times without scarcity, and there is some evidence that during such times they can increase the availability of ICU beds,[35] using them during a time of scarcity can have a different and additional function. During periods of scarcity, time-limited trials can in fact be seen as acknowledging a potential asymmetry between withholding and withdrawing, because they permit withdrawal only after a 'full' attempt at rescuing the patient, not as soon as a new patient with better prospects arrives. In this sense, they will not necessarily lead to an increase ICU capacities during a pandemic. Sometimes they will speak in favor of continued occupancy of a bed, and sometimes they will prevent further occupancy by a patient with very unclear prospects. At the same time, they take account of the concern that the patient would probably not give consent to having his or her rescue attempt interrupted prematurely. A time-limited trial signals that a full attempt aiming for improvement has been made.

A second strategy involves accepting lower prospects in order to continue an ICU treatment than for initial access to the ICU. As laid out earlier, there are different interpretations of the prospects that can be required by triage rules. This allows for divergent applications to new arrivals and those already under treatment. For example, the common triage rule based on interpretation (ii)—which prioritizes patients in the order of their prospects—might be applied when choosing between new arrivals, while the less-demanding interpretation (i)—which de-prioritizes those with a low probability of surviving for a significant amount of time—could be applied to patients who are already under treatment. Alternatively, one could combine access rules according to interpretation (iii), which tries to maximize life-years, with revision rules according to interpretation (ii).

Examples of ethics frameworks that follow such a pattern include the Swiss and German frameworks. For example, for a situation in which no further capacity is available, so that withdrawals would be the only way of providing further capacity ('stage B'), the Swiss framework provides a long list of criteria according to which physicians should exclude new patients from eligibility for an ICU bed that might become available. These criteria include the previously mentioned age limit of 85, a life expectancy of less than 24 months, severe dysfunctions of the liver, kidney or heart, major deficits after a stroke, mid-stage dementia, and a number of further conditions. However, the criteria for actual withdrawals to make space for the remaining newcomers are considerably less strict: they include a lack of improvement, cardiac arrest and the failure of a further organ.[36] Similarly, the German framework suggests a long list of criteria for excluding patients from initial access in case of scarcity, but recommends withdrawal only in case of progressive multi-organ dysfunction, if there is no longer a realistic chance of treatment success, or if a time-limited trial has come to an end without patient improvement.[37]

Such asymmetrical frameworks for withholding and withdrawing treatment are compatible with various options for constructing benefit-oriented triage systems, while at the same time acknowledging remaining ethical uncertainties about withdrawals. However, many of the recently drafted frameworks do not mention this possibility, even though the choice between the various possible interpretations of the benefits that triage systems should aim at has remained somewhat

[32]See, for example, Wilkinson, D., & Suvalescu, J. (2014). A costly separation between withdrawing and withholding treatment in intensive care. *Bioethics*, *28*(3), 127–137; Ursin, op. cit. note 2.

[33]To disambiguate the situation further, ventilators could even be attached to timers so that they would switch off automatically at the end of the trial period; see Ravitsky, V. (2005). Timers on ventilators. *British Medical Journal*, *330*(7488), 415–417. For some related recent discussions from the Jewish tradition, see e.g. Barilan, Y. M. (2015). Rethinking the withholding/withdrawing distinction: The cultural construction of "life-support" and the framing of end-of-life decisions. *Multidisciplinary Respiratory Medicine*, *10*(1), 1–8; Jotkowitz, A., Glick, S., & Zivotofsky, A. Z. (2010). The case of Samuel Golubchuk and the right to live. *American Journal of Bioethics*, *10*(3), 50–53.

[34]BMA, op. cit. note 4; White, D. B., & Lo, B. (2020). A framework for rationing ventilators and critical care beds during the COVID-19 pandemic. *JAMA*, *323*(18), 1773–1774.

[35]Vink, E. E., Azoulay, E., Caplan, A., Kompanje, E. J. O., & Bakker, J. (2018). Time-limited trial of intensive care treatment: An overview of current literature. *Intensive Care Medicine*, *44*(9), 1369–1377.

[36]SAMW, op. cit. note 8.

[37]DIVI, op. cit. note 8.

controversial. Asymmetrical rules for withholding and withdrawing—while nonetheless recommending withdrawals in some cases—can be an appropriate pragmatic response to situations in which it seems paramount to make the most of limited resources, while at the same time acknowledging remaining ethical uncertainties.

7 | SUMMARY

When more outcome-oriented triage rules are used, worries that reviews according to these rules will lead to illegitimate treatment withdrawals are bound to become more serious. Especially if a version of the doing–allowing distinction is considered to be morally relevant, or the notion of a physical violation is considered to be applicable to a withdrawal of treatment, lowering the prognosis requirements for those already under treatment in comparison with new arrivals could be the morally advisable path. It also appears advisable to document the intention of a time-limited trial at the beginning of each treatment effort. If the doing–allowing distinction is considered to be relevant for the assessment of withdrawals, then it should also be borne in mind that this distinction can have a revisionary impact on the very widely shared belief that there is no moral asymmetry between a voluntary, lethal termination of a treatment and its initial refusal.

CONFLICT OF INTEREST

The author declares no conflict of interest.

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