Abstract

The majority of deaths on the intensive care unit now occur following a decision to limit life-sustaining therapy, and end-of-life decision making is an accepted and important part of modern intensive care medical practice. Such decisions can essentially take one of two forms: withdrawing – the removal of a therapy that has been started in an attempt to sustain life but is not, or is no longer, effective – and withholding – the decision not to make further therapeutic interventions. Despite wide agreement by Western ethicists that there is no ethical difference between these two approaches, these issues continue to generate considerable debate. In this article, I will provide arguments why, although the two actions are indeed ethically equivalent, withdrawing life-sustaining therapy may in fact be preferable to withholding.

Introduction

End-of-life decision making for the intensive care unit (ICU) patient has been a hot topic in recent years, with the acknowledgement that such practice is common worldwide [1] and with a new openness among doctors and laypersons regarding the once rather taboo subject of death. Indeed, because the majority of ICU deaths now occur following a decision to limit life-sustaining therapy [2–6], it is important that these often difficult ethical areas be discussed openly.

Essentially, a decision to limit life-sustaining therapy can take one of two forms: withholding or withdrawing. Withdrawal of therapy is relatively easily defined as the removal of a therapy that was started in an attempt to sustain life but has become futile and is just prolonging the dying process. Withdrawal usually concerns therapies such as mechanical ventilation and administration of vasoactive agents. Withholding therapy, on the other hand, concerns the concept of no therapeutic escalation. Perhaps the most frequent example of this is the do not resuscitate (DNR) order (or DNAR – do not attempt to resuscitate). Withholding resuscitation efforts will almost inevitably result in death from a cardiac arrest should one occur. It is important to make this decision in advance because once the cardiac arrest occurs there is no time to think – each second counts. In many advanced cases the DNR order is not sufficient (e.g. the patient with terminal cancer or just very advanced age), and hence do not escalate (DNE) orders (e.g. no mechanical ventilation in respiratory failure or no extracorporeal support in terminal renal failure) may be used. However, it is important to define clearly what is included in a DNE order because less aggressive interventions such as antibiotic use or nasogastric tube feeding may not be seen as significant escalation and could still be given.

The vast majority of doctors accept the principal and application of withholding; indeed, if life-sustaining therapies were not withheld from some patients, ICUs would be full of terminally ill patients with no hope of recovery. The only real objectors to the withholding of therapy are a few individuals with very strongly held religious beliefs who maintain that life must be sustained at all costs. Indeed, modern medical progress increasingly allows us to define the exact moment of death, and patients can certainly be kept ‘alive’ almost indefinitely with the aid of mechanical ventilators, artificial feeds and organ support strategies, among other measures. However, what quality of life do such people have, if they are permanently unconscious and totally reliant on medical expertise for even the most rudimentary of bodily functions. Medical progress in supportive therapies that enable organ functions to be maintained while a patient recovers from a serious illness is indeed remarkable, and should be used for those in whom it is appropriate, but it should not be abused to maintain ‘life’ that is without quality or meaning indefinitely. Indeed, this goes against all four of the basic ethical laws (see below).

Withdrawal of therapy is often seen as less acceptable [7]. Although it is clearly more difficult to discontinue than not to start, I shall argue that withdrawal should be permitted, that it
is ethically equivalent to withholding, and that it may even be preferable to withholding in some cases.

**Withdrawal should be permitted**

There are two reasons why withdrawal of therapy should be allowed. First, if withdrawal of therapy were not permitted, then ICUs would be full of hopelessly ill patients receiving (often expensive) therapies that no longer benefit them. This process would be against the four ethical principles.

1. **Autonomy** – who wishes to remain supported ‘artificially’ if the situation is hopeless? This is the reason why so many individuals now wish to make advance directives; they are afraid of becoming a ‘vegetable’ and being a burden to their relatives and loved ones.
2. **Beneficence** – what is the benefit to the patient of continuing a therapy that carries no advantage?
3. **Nonmaleficence** – even with optimal analgo-sedation, continuing ineffective therapies can cause distress and discomfort (e.g. suctioning, etc.).
4. **Distributive justice** – by continuing ineffective therapy, an ICU bed may be blocked and not available for another patient who may benefit from ICU care. In addition, the costs of the futile care could be better employed elsewhere.

The second reason why withdrawal of therapy should be allowed is that if withdrawal of therapy is not permitted then this may introduce a degree of hesitation into our actions when time is of the essence. For example, in a patient with acute respiratory failure, we may hesitate before intubating the trachea to institute mechanical ventilation because we are unsure of the history of that patient and want to be certain we do not start a therapy that will turn out to be futile but cannot later be withdrawn. However, in the patient who will benefit from the therapy, reflection – even for a few seconds – may make all the difference to their chances of survival. If we know that we can withdraw a therapy at a later date, then each patient will receive timely emergency care.

**Withdrawal is ethically equivalent to withholding at the end of life**

Much has been written about the ethical distinction, or lack thereof, between withdrawing and withholding therapy at the end of life. Withdrawing has been seen as an ‘action’ rather than the passive ‘omission’ of withholding [8], but is doing something ethically any worse, or better, than not doing it if the end result is the same. For example, in the patient who is unable to breathe spontaneously, the active decision to stop mechanical ventilation will have the same immediate consequences as the ‘passive’ decision not to start mechanical ventilation in the first place – the patient will not be ventilated (Fig. 1). In each case, whether withholding or withdrawing, we decide which treatment is to be applied in the immediate future, and the immediate result will be the same regardless of the situation prior to the decision.

**Figure 1**

Similarities between withholding and withdrawing mechanical ventilation at the end of life. Each mechanical breath is represented by a vertical line. Whether the patient is already receiving mechanical ventilation or not, the decision relates to whether to apply it from now (interrupted vertical lines), and the consequences of that decision will be the same.

Western ethicists have largely defended this view of equivalence [5,9–12], and various groups have published guidelines supporting this standpoint. For example, the Belgian Society of Intensive Care Medicine [13] states clearly that there is no ethical or moral difference between withholding and withdrawing life-sustaining therapy, and the British Medical Association’s guidelines [14] state that, ‘Although emotionally it may be easier to withhold treatment than to withdraw that which has been started, there are no legal, or necessary morally relevant, differences between the two actions’.

**Withdrawal may be better than withholding**

Allowing withdrawal of therapy gives the patient every chance of benefiting from that therapy. For example, consider a frail, elderly, atherosclerotic patient who now develops a lung infection. It is probably the end of their life (‘pneumonia is the old man’s friend’), but the prognosis is not absolutely sure. Should we admit the patient to the ICU for a trial of mechanical ventilation while we wait for the antibiotics to clear the infection, or should we leave them on the floor with a probably fatal outcome. Without accurate objective measures of prognosis, physicians are often called upon to make a clinical judgement about the likely outcome in individual patients; such judgements are not always accurate [15], and if the decision is made to withhold therapy then no allowance is made for the possibility that the prognostic conclusion may be wrong. By allowing a so-called ‘ICU test’, in which the patient is admitted to the ICU for a trial, they are at least given a chance; if there is some improvement after 2–3 days then fine, but if there is no such improvement then treatment will be withdrawn. Importantly, if this approach is followed, then the patient and certainly the relatives must be
aware that this is just a ‘test’, that the chances of survival are slim, and that therapy will be withdrawn if it is not seen to be effective. Failure to communicate adequately in this situation could create false hopes and expectations, but withholding therapy from such a patient does not allow them even that small glimmer of hope.

In our own experience in Brussels we frequently give patients the benefit of the doubt and offer them an ICU or therapeutic trial [16], and hence withdrawal of therapy is more common than withholding. Of 109 deaths over a 3-month period, 50 were preceded by a decision to forgo life support: 46 by a withdrawal decision and just four by a withhold decision. Importantly, members of the ICU staff, both doctors and nurses, were globally satisfied with the decisions made. Higher rates of withdrawal than of withholding have been reported in other studies. In a French study [17] 69% of end-of-life decisions were to withdraw and 31% were to withhold, and in the USA Prendergast and Luce [18] reported that 78% of end-of-life decisions were to withdraw and 12% were to withhold.

**Essentials when withdrawing therapy: good communication and explicit decisions**

End-of-life decisions should be made in advance whenever possible. These are difficult issues, and it is often easier to postpone them, to put them off for tomorrow. Some doctors prefer not to think about the future, particularly if it is one that may not be classically termed a medical ‘success’; however, death should not be seen as a failure, but rather as a natural and necessary process. How often do we hear ‘if she deteriorates, let me know’, or ‘we’ll talk about it if his organ function deteriorates, but at the moment he’s stable’? However, what happens when the deterioration occurs suddenly in the middle of the night or when the doctor is unavailable? All likely eventualities must be discussed and planned for before they arise. This is particularly true for decisions to withhold therapy because there is often less time when the acute situation requiring therapy to be withheld or started arises. Preparing for the worst outcome in advance gives everyone time to reflect, to say what they feel and to be involved in the decision. It is also important that end-of-life decisions no longer be made by the ‘paternalistic’ physician alone, but rather that they be ‘shared’ decisions [19]. These decisions should be made by consensus, after open discussion involving nurses and other allied health care personnel (e.g. the physiotherapist who has appreciated the patient’s urge to fight the disease process) involved with the patient and their care, and of course the patient, if possible, and the relatives. However, such decisions should not be left to the relatives alone because this is too great a burden for them, and ultimately it is the physician who is responsible for administering or discontinuing any treatment. Any such discussions and decisions should be documented clearly in the patient notes; in our institution we use ‘green sheets’ (easily identifiable in the often thick patient charts), which are clearly identifiable for all members of staff to consult whenever the need arises.

**Conclusion**

End-of-life decision making is an important and widely accepted part of modern intensive care medical practice [1]. Much time and discussion has been given to the differences between withdrawing and withholding therapy but, as I outline above, these are ethnically and morally identical concepts; withdrawal of therapy should be permitted and may even be preferable to withholding therapy. In all cases the patient should be at the centre of our preoccupations. If our treatment does not benefit the patient (futile therapy) then we are duty bound to stop it without undue delay. Continuing mechanical ventilation or extracorporeal renal support in a patient who has no real chances of recovering a meaningful life is of no use and should be stopped, exactly as it should not be started if there is no chance that it will benefit the patient.

Death in the ICU can risk becoming a technological, impersonal event. We as doctors are privileged to be able to assist our patients in their final journey through the dying process. As such, we have a duty to ensure that our patients die with dignity. Although we may stop active treatment, we must never stop patient care; withdrawal of therapy does not mean withdrawal of care.

**Withdrawing and withholding life-sustaining therapies are not the same: response to commentary by Levin and Sprung**

In their article, Levin and Sprung [20] stress that withholding and withdrawing are different. Of course the acts of withdrawing and withdrawing are not the same in practical terms, but I would still argue that, ethically, there is no difference; the end result is the same. I agree that, as shown in numerous questionnaires and surveys, withdrawal is often felt to be more difficult than withholding [7,8,21,22], but this does not contradict my belief that the two are ethically identical. The fact that one may be more difficult to put into practice than the other does not make a difference to the end result.

Some patients with withholding orders may indeed leave the hospital alive; however, there is ‘withholding’ and ‘withholding’, in the sense that deciding to withdraw life support in the event of a cardiac arrest is quite different from the decision to withhold it in the presence of a cardiac arrest. In the former situation, the patient may very well leave the hospital alive, like many other patients with DNR orders. In the latter situation death is by far the most likely possibility, as when active life support is withdrawn.

Withdrawing life-sustaining therapy is thus equivalent to withholding it and, as elaborated in my original commentary above, may even be preferable. I believe that we must have
the conscience – I would even say the courage – to stop a treatment that no longer makes sense, that can provide no further benefit to the patient (principle of beneficence), that may cause discomfort or even pain (maleficence), and that prolongs the use of limited resources (distributive justice).

Regarding the decision making process itself, of course a patient who is competent should make the decision to withdraw or withhold therapy, but this is an uncommon situation in the ICU. When patients are incapable of making an informed decision themselves, relatives must be told of and involved in the discussions, but they should not be the ones to decide. Like many others, I believe that asking relatives to make such end-of-life decisions is unacceptable; it is unfair to place such a heavy burden on their shoulders at an already difficult time (especially when they do not have the required medical knowledge and expertise) and, in addition, their decision process may be altered by emotive personal reactions (in one direction or the other) and possibly even by personal interest. These final decisions must rest firmly with the physician in charge, in consultation with members of the medical team.

Competing interests
The author(s) declare that they have no competing interests.

References