

Limiting futile therapy as part of end-of-life care in intensive care units

Maria Damps¹, Maksymilian Gajda², Ludwik Stołtny³, Małgorzata Kowalska², Ewa Kucewicz-Czech⁴

¹Department of Anaesthesiology and Intensive Care, Upper Silesian Child Health Centre, Faculty of Medical Sciences in Katowice, Medical University of Silesia, Poland

²Department of Epidemiology, School of Medicine in Katowice, Medical University of Silesia, Poland

³Department of Anaesthesiology and Intensive Care, Upper Silesian Child Health Centre, Poland

⁴Department of Cardiac Anaesthesia and Intensive Care, Leszek Giec Upper-Silesian Medical Centre, Medical University of Silesia, Katowice, Poland

Abstract

The debate about medical futility often involves intensive care units where life-support procedures are routinely applied. Futile therapy is part of end-of-life therapy. In the discussion about medical futility it is important to distinguish the effect of therapy from the benefit for the patient. The goal of treatment is not to maintain the function of an organ, body part or physiological activity, but to maintain health as a whole. Prolonging ineffective treatment violates the standard of good medical practice.

In 2014, the first Polish guidelines on limiting futile therapy in patients treated in intensive care units were published. This document presents the official position of intensive care experts consulted by medical societies of other medical disciplines.

Limitation of futile therapy by withdrawing from already used treatments or withholding new therapies does not mean that the role of medical personnel has ended. Intensive care turns into palliative care.

The list of comorbidities showing a statistically significant correlation with medical futility has been refined. These include heart failure (NYHA III/IV), neoplastic disease and disseminated neoplastic process, and failure of two or more organs.

The published survey results are devastating; 66-89% of intensive care nurses have provided futile treatment in their careers. Intensivists estimated that, on average, 20% of patients in intensive care units receive futile therapy.

There is a need to disseminate standards and procedures related to end-of-life care in Polish intensive care units.

Key words: futile therapy, palliative care, autonomy of patient, communication with the patient and his family.

Anaesthesiol Intensive Ther 2022; 54, 3: 279–284

Received: 28.03.2021, accepted: 22.11.2021

CORRESPONDING AUTHOR:

Maria Damps, Department of Anaesthesiology and Intensive Care, Upper Silesian Child Health Centre, Faculty of Medical Sciences in Katowice, Medical University of Silesia, Poland, e-mail: damps@wp.pl

In the wake of the COVID-19 pandemic, we were faced with the dilemma of priority access, rationalization, allocation of resources, and treatment resources. The increasing number of infected patients, the lack of hospital beds, personal protective equipment shortages and medics working beyond their capacity all contributed to the picture of our reality during the pandemic.

At this difficult time, the thought of unsettled discussions about medical futility is persistently recurring. Unused guidelines, lack of legal regulations, and neglected education turn out to be a problem that becomes very acute in the year of the pandemic. The debate about medical futility is often focused on intensive care units where life-

support procedures are routinely used. While futile therapy is part of the end-of-life therapy, there is very little research on futility in perioperative medicine [1].

In our opinion, as the new role of anaesthesiologists as “perioperative specialists”, an attitude of an anaesthesiologist who is merely a service provider, limiting his competence to providing anaesthesia, can be described as archaic. The anaesthesiologist may act as a consultant who plans the type of anaesthesia, place of hospitalization after the surgery, and the scope of necessary monitoring. The optimal position of an anaesthesiologist is to be the patient advocate. The anaesthesiologist becomes a creative guide in the discussion on the

selection of the most beneficial form of therapy for the patient. In the UK, the paradigm of preparation for surgery has changed. A patient with multiple morbidities who is to undergo high-risk surgery is first referred to an anaesthesia clinic to determine the possibility of performing the planned surgery (fitness for surgery) [2]. The anaesthesiologist, acting as the patient's advocate, has the right to discuss the form of therapy, using arguments regarding the benefits and drawbacks of the proposed treatment. Sometimes the patient has unrealistic expectations about treatment and expects a full recovery. The economy of hope promoted in the media, i.e., the development of medical technologies with unlimited possibilities, creates the belief that death is not in the hands of nature but the hands of medical science. The perception is that the patient dies because the medicine cannot save him, not because life is limited by death. Doctors treat the patient's death as a personal failure. It sometimes happens that the remedy for this failure is prolonged dying [3]. We are witnessing the medicalisation of death, i.e., its usurpation by medicine.

DEFINING THE THERAPEUTIC GOAL

Planned medical intervention as a consequence of the diagnosis assumes the achievement of the therapeutic goal [4]. The relativity of the goal should be considered, which means that the patient will survive a critical condition or an operation, but without the perspective of life outside the intensive care unit and dependent on the procedures supporting vital functions [5]. Schneiderman *et al.* [6] point out that the goal of treatment is not to maintain the function of an organ, part of the body, or physiological activity, but to maintain health as a whole. Treatment should not involve agents with a low probability of achieving any clinical effect or bringing the patient more suffering than benefits. The distinction between clinical effect and patient benefit underlies the modern debate about medical futility. Providing futile treatment can only be justified in an individual, personalized approach, in response to the patient's expectations. If life extension is an end in itself for the patient, medically futile interventions may be negotiable. A balanced and careful discussion between the medics and the patient/family is necessary, taking into account the risks, benefits, and alternative therapy. Sometimes such talks lead to an agreement. In such cases, the soothing function of time should be emphasised [7]. Lack of consensus results in the necessity to appeal to an ethics committee and, ultimately, to a court.

There is no justification for the routine futility of action. All the arguments support the liberation of the medical world from such standards.

PATIENT AUTONOMY

The question of who should ultimately decide whether to continue or limit futile therapy was already raised at the end of the last century [8]. There are still discussions about the structure of the patient's consent and the circumstances that could strengthen or limit the patient's autonomy in the context of obtaining consent in specific clinical situations [9]. The optimal solution, which should be pursued beyond any doubt, is a common consensus developed by the doctor and the patient. The German ethicist and philosopher of medicine Gerald Neitzke [10] wrote in his numerous articles devoted to the discussed issue that the best treatment option that a physician can present to a patient requires referring to the concept of medical art, according to which the doctor knows the patient, and carefully examines his/her situation. Medics must avoid conflicts and, against all circumstances, try to build a relationship based on trust [11]. The Nobel laureate Daniel Kahneman [26] has described two separate information processing systems that explain why people sometimes act against their interests. The first system consists of a quick, automatic, and highly environmentally sensitive response to an emergency. The second system uses slow, reflective data processing taking into account goals and intentions. In complex, overwhelming situations, under time pressure or as a result of external pressure, people use the first system when making decisions. Medical personnel are usually the recipient of the emotional reaction of the patient/family to the news of imminent death. Sudden death does not give the patient and his/her immediate family time to understand and accept the inevitability of death; it causes resistance or rebellion. Empathy, unlimited time to talk with the family, and not taking radical, immediate decisions prevent conflicts. Family members often feel the need to speak. In such situations, a compassionate and reserved physician remains silent [12]. So, it seems that these difficult conversations should not be conducted during the on-call time. It is good practice for the doctor in charge of the ward, the ward nurse, and the doctors directly involved in the treatment to participate in these discussions. In this way, both the patient and the family witness the involvement of the entire team in the treatment process.

DECISION-MAKING

Prolonging ineffective treatment violates the standard of good medical practice. It exposes the patient to unjustified suffering, endless hospitalization, and separation from relatives. The unconscious patient is deprived of their dignity. Professor Kornel Gibiński, a doctor, scientist, and humanist, already in the

times when he practised himself, drew attention to the fact that the Polish medical world did little to ensure a dignified death for a dying patient. He taught that compassion and sensitivity to suffering are the basis of the medical profession. He added that the death of a patient is not a failure; it is a natural thing that both the patient and the doctor must take into account [13]. Similar views are expressed by Piotr Morciniec [14], professor of theological sciences and specialist in the field of moral theology. In his opinion, modern medicine is focused on success, and whenever death comes, medics treat it as a failure. Patients, enchanted by the development of medicine, began to treat doctors as priests and medicine became a surrogate for religion. The tragedy is that medicine fails to live up to those expectations, and “priests” do not have the power that is required of them.

At times, patients and their relatives are convinced that not everything was done properly (“If X had been done, the patient would not have died!”). They accuse medics of malpractice with many of the claims being a result of failure to meet expectations and disruption of faith in the power of medicine.

Doctors, wondering about a method of treatment, often focus too much on how to implement it. Instead, they should ask why they should implement it. Does this therapy make sense? Is that why we should delay death, prolong the dying process because we do not want to participate in the failure of treatment? If this is the case, it should be remembered that at the centre of our activities is a sick person, the patient.

In 2014, the first Polish guidelines on limiting futile therapy in patients treated in intensive care units were published [15]. This document presents the official position of intensive care experts consulted by medical societies of other medical disciplines. The document has been accompanied by an ethical and legal opinion [16]. The main indication for ICU treatment is the potential reversibility of the existing organ failure [15]. The goal of intensive care is to discharge the patient from the ward. The impossibility of achieving such a goal prompts us to consider limiting futile therapy. The authors of the guidelines included them in 12 points. In our opinion, point 9, regarding the role of the family in deciding to implement the limitation of futile therapy, seems to require some clarification. If the patient is unable to express his/her own will, the family cannot be burdened with the decision to implement futile treatment or feel responsible for it. The family, however, must share the doctors’ opinion and their conviction that escalation of therapy bears the hallmarks of futility, and limiting it is an optimal procedure concerning the sick relative.

In cases where the family insisted on persevering with the treatment, which was completely inconsistent with the doctors’ opinion, the US court expressed solidarity with the patients’ families and issued sentences in line with their expectations [17].

Family involvement in the decision-making process takes place more often in the United States than in Europe [18]. The Ethicus study [19] carried out in 37 European intensive care units shows that in northern European countries family discussion takes place in 84% of cases, in Central Europe in 66%, and only in 47% in southern Europe. The decision-making model in these difficult conditions varies according to latitude, religion, religiosity, and culture. For everyone, however, the overriding issue should be the individualization of decisions. The doctor should respect the sense of hope characteristic of the patient and his/her family, but at the same time is obliged to maintain a realistic judgment of the situation. The meaning of such a concept is very well reflected in the words: remain hopeful but prepare for the worst [20].

Limitation of futile therapy by withdrawing from already used treatments or withholding new therapies does not mean that the role of medical personnel has ended. Intensive care turns into palliative care. The use of drugs aimed at relieving pain and reducing suffering should be accepted, even if such a structured therapy may accelerate death. In these situations, the principle of double effect works; it is applied to the moral assessment of an act with a double effect, positive and negative [21]. The principle is limited to a few conditions. An act must be inherently good, the intention of the person committing it must also be good, and the good and bad caused by the act must be proportional. According to this principle, administration of high, sometimes lethal doses of morphine to terminal patients is allowed [22].

THE ROLE OF PALLIATIVE CARE

Optimal end-of-life care is based on the principles of palliative medicine. The World Health Organization (WHO) defines palliative care as measures aimed at improving the quality of life of the patient and his/her relatives who are faced with a terminal disease. Its task is to provide the patient with benefits without suffering in the physical, mental, and spiritual dimensions [23]. The patient’s well-being becomes the main goal of therapy.

LIMITATION OF MEDICAL FUTILITY IN ICUS

In 2017, a global, multidisciplinary WELPICUS (Consensus for Worldwide End-of-Life Practice for Patients in ICUs) study was published, the aim of which was to try to agree on a consensus on the

basic definitions relating to end-of-life therapy in ICU patients [22]. The agreement was reached in 95% of the definitions discussed. The list of comorbidities showing a statistically significant correlation with medical futility has been refined. These include heart failure (NYHA III/IV), neoplastic disease and disseminated neoplastic process, and failure of two or more organs. The greatest differences of views among the participants of the discussion focused on identifying therapeutic procedures not recommended in end-of-life therapy. Based on the data collected in 2019, the sources of divergent views were analysed, proving that the greatest controversy is among clinicians. Situations were observed in which the disagreement concerned doctors working in one hospital [24]. The authors adopted the principle of not commencing any activities related to limiting futile therapy until an unambiguous verdict has been reached in the treatment team (doctors and nurses). Doubt of even one member of the team is a contraindication to initiating the procedure.

A cohort study assessing the frequency of limiting futile therapy, which analysed data from 84 countries, shows that the procedure concerns 13% of patients hospitalized in ICUs [25]. The authors draw attention to the fact that 1/3 of patients for whom such a decision was made survived the hospital period. These data indicate that recognizing the futility of intensive care procedures is not the same as a death sentence. The results of the latest Polish study analysing the use of the native protocol for stopping futile treatment are similar. They show that the protocol was implemented in 9–20% of the patients hospitalized in selected ICUs [16]. The duration of hospitalization was an important factor leading to the decision about medical futility. The cited studies show that withholding new procedures is more common than withdrawing. The published results are devastating; 66–89% of intensive care nurses have provided futile treatment in their careers. Intensivists estimated that, on average, 20% of patients in the ICUs receive futile therapy [7].

CONCLUSIONS

There is a need to disseminate standards and procedures related to end-of-life care in Polish ICUs. We have guidelines that can be incorporated into daily clinical practice. The first 72 hours of hospitalization in the intensive care unit effectively predict the outcome of the treatment, and before deciding on medical futility, a time-limited trial (TLT) can be implemented [21]. All the principles of therapy and parameters for the assessment of the response to treatment must be agreed upon with the patient/family. Intensive therapy is implemented for a strictly defined, predetermined period, after which,

based on the assessment of selected parameters, the patient's response to the treatment is verified. The lack of a positive reaction allows for the limitation of medical futility, an ambiguous result obliges the extension of the trial period, and the improvement of the condition is synonymous with the continuation of intensive therapy. The TLT promotes a consensus between the treatment team and family. It is used in patients admitted to the intensive care unit due to a sudden threat to life, with concomitant advanced diseases, limited quality of life, and exhausted physiological reserves. Properly implemented, the TLT improves the quality of care and guarantees the fulfilment of patients' wishes regarding the treatment. Many patients with advanced diseases, informed about therapeutic options, give up invasive therapies and choose palliative care.

Recognizing the importance of the problem of medical futility is the beginning of the path we must follow to satisfy the ICU patients' right to a good death. Dying in a hospital with dignity proves that medicine is an art.

ACKNOWLEDGEMENTS

1. Financial support and sponsorship: none.
2. Conflicts of interest: none.

REFERENCES

1. Callahan D. Futile treatment and conquering death. *Perspect Biol Med* 2018; 60: 331-335. doi: 10.1353/pbm.2018.0005.
2. Nurok M, Sadovnikoff N. Why are we doing this case? Can perioperative futile care be defined? *Curr Opin Anesthesiol* 2013; 26: 176-181. doi: 10.1097/ACO.0b013e32835e127e.
3. Ilpo H. Health in prospect. High-tech medicine, life enhancement, and the economy of hope. *Science Studies* 2004; 17: 3-19.
4. Martin DK, Emanuel LL, Singer PA. Planning for the end of life. *Lancet* 2000; 356: 1672-1676. doi: 10.1016/S0140-6736(00)03168-8.
5. Derse AR. The brutal but utile truth of "futile". *Perspect Biol Med* 2018; 60: 340-344. doi: 10.1353/pbm.2018.0007.
6. Schneiderman LJ, Jecker J, Jonsen AR. Medical futility: its meaning and ethical implications. *Ann Intern Med* 1990; 112: 949-954. doi: 10.7326/0003-4819-112-12-949.
7. Cifrese L, Rincon F. Futility and patients who insist on medically ineffective therapy. *Semin Neurol* 2018; 38: 561-568. doi: <https://doi.org/10.1055/s-0038-1667386>.
8. Veatch RM, Spicer CM. Medically futile care: the role of the physician in setting limits. *Am J Law Med* 1992; 18: 15-36.
9. Vennin P. Informed consent or choice? An ethical dilemma in oncology practice. *Bull Cancer* 2007; 94: 453-459 [Article in French].
10. Neitzke G. Indication: scientific and ethical basis of medical practice. *Med Klin Intensivmed Notfmed* 2014; 109: 8-12. doi: 10.1007/s00063-013-0280-9 [Article in German].
11. Pochard F, Azoulay E, Chevret S, et al., for the French FAMIREA group. Symptoms of anxiety and depression in family members of intensive care unit patients: ethical hypothesis regarding decision-making capacity. *Crit Care Med* 2001; 29: 1893-1897. doi: 10.1097/00003246-200110000-00007.
12. McDonagh JR, Elliott TB, Engelberg RA, et al. Family satisfaction with family conferences about end-of-life care in the intensive care unit: increased proportion of family speech is associated with increased satisfaction. *Crit Care Med* 2004; 32: 1484-1488. doi: 10.1097/01.ccm.0000127262.16690.65.
13. Bochenek K, Kortko D. *Ludzie czy bogowie*. Warszawa: Agora; 2014.
14. Morciniec P. *Bioetyka personalistyczna wobec zwłok ludzkich*. Opole: Redakcja Wydawnictw Wydziału Teologicznego Uniwersytetu Opolskiego; 2009.

15. Kübler A, Siewiera J, Durek G, Kusza K, Piechota M, Szkulmowski Z. Wytuczne postępowania wobec braku skuteczności podtrzymywania funkcji narządów (terapii daremnej) u pacjentów pozbawionych możliwości świadomego składania oświadczeń woli na oddziałach intensywnej terapii. *Anestezjologia Intensywna Terapia* 2014; 46: 229-234.
16. Woźnica-Niesobska E, Goździk W, Śmiechowicz J, Strożecki Ł, Kubler A. Analysis of management protocols regarding ineffective maintenance of organ functions in patients treated at the Intensive Care Unit of the University Hospital in Wrocław. *Anaesthesiol Intensive Ther* 2020; 52: 3-9. doi: <https://doi.org/10.5114/ait.2020.92990>.
17. Crippen D, Kilcullen JK, Kelly DF. Three patients. International perspective on intensive care at the end of life. New York: Springer Science Business Media; 2002.
18. Moselli NM, Debernardi F, Piovano F. Forgoing life sustaining treatments: differences and similarities between North America and Europe. *Acta Anaesthesiol Scand* 2006; 50: 1177-1186. doi: 10.1111/j.1399-6576.2006.01150.x.
19. Sprung CL, Cohen SL, Sjøkvist P, et al. End-of-life practices in European intensive care units: the Ethicus Study. *JAMA* 2003; 290: 790-797. doi: 10.1001/jama.290.6.790.
20. Long AC, Brumback LC, Curtis JR, et al. Agreement with consensus statements on end-of-life care: a description of variability at the level of the provider, hospital, and country. *Crit Care Med* 2019; 47: 1396-1401. doi: 10.1097/CCM.0000000000003922.
21. Vink EE, Azoulay E, Caplan A, Kompanje EJO, Bakker J. Time-limited trial of intensive care treatment: an overview of current literature. *Intensive Care Med* 2018; 44: 1369-1377. doi: 10.1007/s00134-018-5339-x.
22. Sprung CL, Truog RD, Curtis JR, et al. Seeking worldwide professional consensus on the principles of end-of-life care for the critically ill. The Consensus for Worldwide End-of-Life Practice for Patients in Intensive Care Units (WELPICUS) study. *Am J Respir Crit Care Med* 2014; 190: 855-866. doi: 10.1164/rccm.201403-0593CC.
23. Dunn GP, Martensen R, Weissman D (eds.). *Surgical palliative care: a resident's guide*. Chicago: American College of Surgeons; 2009.
24. Long AC, Brumback LC, Curtis JR, et al. Agreement with consensus statements on end-of-life care: a description of variability at the level of the provider, hospital, and country. *Crit Care Med* 2019; 47: 1396-1401. doi: 10.1097/CCM.0000000000003922.
25. Lobo SM, De Simoni FHB, Jakob SM, Estella A, Vadi S. Decision-making on withholding or withdrawing life support in the ICU: a worldwide perspective. *Chest* 2017; 152: 321-329. doi: 10.1016/j.chest.2017.04.176.
26. Kahneman D. *Thinking, Fast and Slow*. New York: Farrar, Straus and Giroux; 2011.

