Introduction

The choice of the papers that have been included in this chapter was not easy. In general, I tried to include the first papers evaluating important ethical issues in critical care medicine. These included the issues of informed consent, patient and family preferences, rationing, withholding and withdrawing life-sustaining treatments, futility, brain death, and unethical procedures in patients.
Title

Ethics and clinical research

Author

Beecher HK

Reference


Abstract

Not available

Summary

The frequency of unethical procedures in clinical research was evaluated by the examination of 100 consecutive human studies published in 1964 in an excellent journal. In only 2 of 50 studies was consent mentioned. Examples from the 22 provided studies include:

1. **Known effective treatment withheld** – To determine the relapse rate of typhoid fever, 25 patients were treated with chloramphenicol, and 157 received symptomatic treatment without chloramphenicol (mortality – 8% versus 23% respectively).

2. **Study of therapy** – To evaluate hepatic dysfunction from therapy with triacetyleandomycin, 50 patients including mentally impaired subjects or juvenile delinquents treated for acne were studied. By the time half the patients had received the drug for 4 weeks, the high incidence of significant hepatic dysfunction led to its discontinuation in the remainder of the group.

3. **Physiological studies** – A controlled, double-blind study to further define the hematological toxicity of chloramphenicol by randomly giving 2 or 6 g of chloramphenicol daily. Toxic bone marrow depression developed in 2 of 20 patients given 2 g, and 18 of 21 patients given 6 g daily.

4. **Studies to improve the understanding of disease** – Liver cancer cells were injected into 22 human subjects as part of a study of immunity to cancer. Subjects were told they were receiving ‘some cells’, but the word cancer was not mentioned.

5. **Technical study of disease** – The transbronchial approach for left heart catheterization was developed as a new approach in >500 cases; 15 patients had normal hearts and underwent bronchoscopy for other reasons.

Unethical or questionably ethical procedures involving risks to the health or life of subjects are not uncommon. Thoughtlessness and carelessness, not a willful disregard of the patient’s rights, account for most of the cases. These types of activities will do great harm to medicine unless soon corrected. Data obtained unethically should not be published, or should be published with a stern editorial comment. Serious attention to this problem is urgently required.

Citation count

535
Related references


Key message

Unethical or questionably ethical procedures have been performed on human subjects and published in a prestigious medical journal.

Why it’s important

This was the first major acknowledgment by American medicine after the Nuremberg trials that unethical behaviour was present in clinical research in the USA. Subsequent to this revelation, steps were taken to remedy the situation.

Strengths

A well-known clinician served as a whistle blower to prevent further harm to medicine because of unethical procedures in research.

Weaknesses

Individuals and references were not cited.

Relevance

Clinical research is extremely difficult to perform in the critically ill. One must always be certain that ethical standards are followed.
Informed consent in theory and practice: legal and medical perspectives on the informed consent doctrine and a proposed reconceptualization

Sprung CL, Winick BJ

Crit Care Med 1989; 17: 1346–1354

The theoretical, legal, and medical doctrines of informed consent are analyzed. The elements of informed consent include disclosure of information, competency, understanding, voluntariness, and decision-making. The doctrine is ground in deference to individual autonomy, and recognition that the exercise of self-determination in matters of health is a liberty interest honored by our history and traditions.

The exceptions to informed consent, including emergency, incompetency, therapeutic privilege, and waiver, are especially important in critically ill patients, and reflect a balancing of autonomy values and society's interest in the promotion of health. Legal decisions inevitably are based on atypical physician-patient encounters and focus on a particular problem or procedure rather than on overall medical care. In addition, they often reflect an artificial view of the doctor-patient relationship. Medical decision-making is a complex, evolving pursuit of a diagnosis and proper treatment regimen. Moreover, patients are not always interested in the role assigned to them by law. A reconceptualization of informed consent doctrines utilizing sliding scale standards based on variables pertinent to each individual patient is suggested.

Key message
Physicians should view informed consent as a balance between the conflicting goals of individual self-determinism and health.

Why it’s important
The first review of the theoretical, legal, and medical doctrines of informed consent, with special emphasis on critically ill patients.

Strengths
A review stating the legal requirements and exceptions to informed consent, together with the medical realities of the process.
A practical reconceptualization of informed consent utilizing sliding scale standards based on variables pertinent to each individual patient is suggested.

Weaknesses
A review, rather than objective, empirical data. An American, rather than worldwide, perspective.

Relevance
Informed consent is an extremely important issue in critically ill patients who are often incompetent and require emergency procedures and treatments.
**Title**

*Rationing intensive care – physician responses to a resource shortage*

**Author**

Singer DE, Carr PL, Mulley AG, Thibault GE

**Reference**


**Abstract**

To determine how physicians ration limited critical resources, we studied the allocation of intensive care unit (ICU) beds during a shortage caused by a lack of nurses. As the bed capacity of the medical ICU decreased from 18 to 8, the percentage of days on which one or more beds were available decreased from 95 to 55 per cent, and monthly admissions decreased from 122 to 95.

Physicians responded by restricting ICU admissions to acutely ill patients and reducing the proportion of patients admitted primarily for monitoring. Among patients admitted because of chest pain, the proportion actually sustaining a myocardial infarction increased linearly with the restriction in bed capacity. Although more patients with myocardial infarction were admitted to non-intensive care areas, there was no increase in mortality. In addition, physicians transferred patients out of the ICU sooner. There was no apparent withdrawal of care from dying patients.

Our results suggest that physicians can respond to moderate resource limitations by more efficient use of intensive care resources.

**Summary**

Physician triage decisions were compared between July to December 1980 (baseline period with 18 ICU beds), and July to December 1981 (decreased ICU bed capacity with 8–14 beds due to a nursing shortage). The medical intensive care and coronary care unit (ICU) occupancy rate increased from 77% to 90%, whereas bed availability decreased from 95% to 55%. The number of ICU admissions decreased, and the admitted patients had a greater severity of illness, as measured by major interventions per patient and the rate of confirmed myocardial infarctions. Although more patients were admitted directly to the wards with chest pain, and more patients were subsequently transferred from the ward to the ICU with chest pain, there were no significant mortality differences between the years. In addition to maintaining stricter criteria for ICU admission, patients were transferred out of the ICU after shorter lengths of stay. This was especially true for those patients admitted for monitoring. There was no difference in ICU length of stay for those patients eventually dying in the hospital, suggesting that withdrawal of care from dying patients did not increase for triage purposes.

**Citation count**

142

**Related references**


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**Key message**

Physicians can respond to moderate resource limitations by more efficient use of ICU resources by restricting admissions to more severely ill patients, decreasing the proportion of patients primarily admitted for monitoring, and transferring patients out of the ICU sooner.

**Why it’s important**

This is the first systematic study of physician practices in triaging patients for ICU beds during a period of scarcity, and the effects of these decisions. The study emphasizes physicians’ decreasing ‘preload’ and ‘afterload’ to triage patients for intensive care.

**Strengths**

Systematic evaluation of admission and discharge diagnoses, readmissions, ICU and hospital lengths of stay, ICU and hospital mortality rates, and number of major interventions before and during an ICU bed shortage.

**Weaknesses**

1. Evaluation of only medical intensive care and coronary care unit patients, rather than general or surgical ICU patients.

2. Evaluation of patients admitted to the ICU, rather than the total hospitalized patient population that required ICU.

3. Even at a time of shortage, the ICU operated with one or more available beds more than half the time. These results may not apply to an ICU that functions at capacity and has further bed shortages.

**Relevance**

ICU triage decisions are made daily in ICUs throughout the world. Objective criteria to define clearly which patients actually benefit from ICU care, and which are ‘too sick’ or ‘too well’ to benefit from ICU care, are not available.
Patients’ and families’ preferences for medical intensive care

Author

Danis M, Patrick DL, Southerland LI, Green ML

Reference

JAMA 1988; 260: 797–802

Abstract

Medical ethics suggest that life-sustaining treatment decisions should be made with consideration for patients’ preferences and quality of life. Patients were interviewed who were at least 55 years old, and had experienced medical ICU at a university hospital during a one-year period, to determine their preferences regarding intensive care; family members were interviewed if the patient had died (n = 160). Seventy percent of patients and families were 100% willing to undergo intensive care again to achieve even one month of survival; 8% were completely unwilling to undergo intensive care to achieve any prolongation of survival. Preferences were poorly correlated with functional status or quality of life, and were not altered by life expectancy for 82% of respondents. Age, severity of critical illness, length of stay, and charges for intensive care did not influence willingness to undergo intensive care. These data suggest that personal preferences may conflict with any health policy that limits the allocation of intensive care based on age, function, or quality of life.

Summary

All patients aged ≥55 years who lived within a 95-km radius admitted to the medical or respiratory ICUs for at least 24 hours between 1 January and 31 December 1983 were studied. Patients or family members of those patients who were incompetent or who had died were later interviewed at home. Study criteria were met by 193 patients, and 160 (83%) of the patients (69) or family members (91) agreed to participate. Patients averaged two chronic organ diseases and one sickness-related dysfunction. Fifty-one (74% of the surviving patients) and 60 (67%) of the families were willing to undergo intensive care even for a period of 1 month’s life prolongation. Preference for intensive care did not correlate with the patient’s functional status or quality of life, age, length of stay, or APACHE II score. Patients (38%) and family members (41%) said they would not choose intensive care if they had no hope of recovery, they were only being kept alive by machines, they were in a vegetative state or severely neurologically impaired, or going to be too much trouble for the family.

Citation count 168

Related references


**Key message**

Elderly patients previously hospitalized in the ICU or their representatives prefer to undergo ICU care again to minimally prolong life. Patients and families seem to value survival over functional status and perceived quality of life, if the patients’ perceived quality of life is not too low.

**Why it’s important**

This was the first study evaluating patient preferences for intensive care related to their perception of quality of life.

**Strengths**

1. Consecutively admitted elderly patients to an ICU over a period of a year.
2. The patient population is an elderly one, with underlying diseases in which these decisions are extremely pertinent.

**Weaknesses**

1. The study evaluates patients who have already experienced intensive care, and does not evaluate patient preferences before their ICU experience.
2. It is unclear whether the conclusions of this study relate to other types of ICU patients (e.g. surgical), or younger patients.

**Relevance**

The autonomous preferences of patients and families for intensive care despite minimal likelihood of benefit conflict with the limited scarce resource of ICU beds and the ability to provide equitable care to all patients requiring ICU care.
Medical futility: its meaning and ethical implications

Schneiderman LJ, Jecker NS, Jonsen AR

Ann Intern Med 1990; 112: 949–954

The notion of medical futility has quantitative and qualitative roots that offer a practical approach to its definition and application. Applying these traditions to contemporary medical practice, we propose that when physicians conclude (either through personal experience, experiences shared with colleagues, or consideration of published empiric data) that in the last 100 cases a medical treatment has been useless, they should regard that treatment as futile. If a treatment merely preserves permanent unconsciousness or cannot end dependence on intensive medical care, the treatment should be considered futile. Unlike decision analysis, which defines the expected gain from a treatment by the joint product of probability of success and utility of outcome, our definition of futility treats probability and utility as independent thresholds. Futility should be distinguished from such concepts as theoretical impossibility, such expressions as ‘uncommon’ or ‘rare,’ and emotional terms like ‘hopelessness.’ In judging futility, physicians must distinguish between an effect, which is limited to some part of the patient’s body, and a benefit, which appreciably improves the person as a whole. Treatment that fails to provide the latter, whether or not it achieves the former, is ‘futile.’ Although exceptions and cautions should be borne in mind, we submit that physicians can judge a treatment to be futile, and are entitled to withhold a procedure on this basis. In these cases, physicians should act in concert with other health care professionals, but need not obtain consent from patients or family members.

This is a theoretical and practical approach to the concept of futility, with specific standards to invoke futility. A treatment that does not improve the patient’s prognosis, comfort, well-being, or general state of health should be considered futile. Futility refers to the objective quality of an action, whereas hopelessness describes a subjective attitude. Futility may refer to an improbability or unlikelihood of an event happening (quantitative), or to the quality of the event that treatment would produce (qualitative). Futility describes any effort to achieve a result that is possible, but that reasoning or experience suggests is highly improbable, and that cannot be systematically produced. In judging futility, as in other matters, physicians should admit uncertainty rather than impose unsubstantiated claims of certainty. Specifically excluded from this concept of futility is medical care for patients for whom such care offers the opportunity to achieve life goals, however limited. Physicians’ duty to serve the best interests of the patient may require that exceptions to this approach be made under special circumstances.
Related references


Key message

Futility is a professional judgment that takes precedence over patient autonomy, and permits physicians to decide what is a medical benefit without patient approval.

Why it’s important

This is the first paper addressing the issue of futility that attempted to objectify and provide a practical approach to its definition and application.

Strengths

The proposed approach compares reasonably well with ideas held by many physicians.

Weaknesses

1. The proposed selection of proportions of success is arbitrary.
2. Excluding patient input from assessments of qualitative futility excludes the possibility of offering an opportunity to achieve life goals, which the authors state is one of the exclusions from their concept of futility.
3. The proposal invites abuse, neglect, and a retreat to paternalism.

Relevance

Despite great advances in medical technology, many patients remain in intensive care units with little hope of survival, continued dependence on intensive care, or permanent unconsciousness. This paper provides a practical approach to these patients.
**Title**

Withholding and withdrawal of life support from the critically ill

**Author**


**Reference**


**Abstract**

We investigated decisions to withhold or withdraw life support from patients in the medical-surgical intensive care units (ICUs) at the Moffitt-Long Hospital of the University of California and San Francisco General Hospital, from July 1987 through June 1988.

Among 1719 patients admitted to the two ICUs, life support was withheld from 22 (1%), and withdrawn from 93 (5%). The reason for limiting care was poor prognosis. Of these 115 patients (18 of whom were considered brain-dead), 89 died in the ICU (accounting for 45% of all deaths there), and all but 1 of the remaining patients died after transfer from the ICU. Thirteen (11%) had earlier expressed the wish that their terminal care be limited, but this affected care in only four cases. Only 5 of the 115 patients made the actual decision to limit care; the others were incompetent at the time. Of the latter, 102 had families who participated in the decision; family members of the other 8 incompetent patients could not be found, and the decisions were made by physicians. Only 10 families initially disagreed with the recommendations to limit care, and they later agreed. The median duration of intensive care among the patients from whom life support was withheld or withdrawn was eight days at Moffitt-Long Hospital, and four days at San Francisco General, as compared with medians of three and one days, respectively, for other patients who died in the ICU.

We conclude that although life-sustaining care is withheld or withdrawn relatively infrequently from patients in the ICU, such decisions precipitate about half of all deaths in the ICUs of the hospitals we studied. In most of these cases the patients are incompetent, but physicians and families usually agree to limit care.

**Summary**

All patients admitted to two medical-surgical ICUs from July 1987 to June 1998, and from whom life support was withheld or withdrawn, were studied. Among 1719 patients admitted to the ICU, life support was forgone from 115 (7%). Support was withdrawn from 22 (19%), and withdrawn from 93 (81%). In all, 198 patients died in the ICU, and 89 (45%) died after support was withheld or withdrawn. The remaining 26 of the 115 patients were transferred from the ICU with the expectation that they would die. Only one of these patients was discharged from the hospital; the remainder died on the ward within 2 weeks of ICU discharge. Sixty-six patients had intracranial lesions (18 with brain death), 17 were postoperative, 30 with respiratory failure, and 14 had underlying cancer. DNR orders were written for 107 of the patients (93%). One hundred and five patients (98%) died or were discharged from the ICU within 48 hours of the DNR order. Reasons for forgoing life support included brain death, poor prognosis, futility, extreme suffering, and a request by the patient or family. Mechanical ventilation was the intervention most commonly withdrawn, and vasopressors the intervention most frequently withheld.
Related references

1. In the matter of Karen Quinlan, 70 NJ 10, 355 A2d 647 (1976).
2. Grenvik A, Powner DJ, Snyder JV, Jastremski MS, Babcock RA, Loughhead MG. Cessa-
3. Koch KA, Rodeffer HD, Wears RL. Changing patterns of terminal care management in
4. Prendergast TJ, Luce JM. Increasing incidence of withholding and withdrawal of life

Key message

Although withholding and withdrawing life support is relatively infrequent in the total number
of patients admitted to the ICU, it is common in those patients who die and precipitates
death in approximately half of these patients. Most patients are incompetent, and family
members are involved and agree with physician recommendations in most cases.

Why it’s important

This is the first study evaluating the manner, reasons, and circumstances under which life
support is withheld or withdrawn in the ICU.

Strengths

1. Comprehensive study of two medical-surgical ICUs evaluating all patients admitted
over an entire year.
2. Evaluation of underlying disorders, incidence of the activity, competency of the patients,
and agreement of families with the decision.

Weaknesses

1. A closed format questionnaire was used which did not allow for all possible
responses.
2. Poor prognosis and futility are not objective, diagnostic reasons for withholding or
withdrawing therapy.

Relevance

Forgoing life-sustaining treatment is one of the most difficult decisions made in the ICU.
This paper had added relevance with the increasing incidence of forgoing support in the
ICU over the last several years.
Title

Determinants in Canadian health care workers of the decision to withdraw life support from the critically ill

Author

Cook DJ, Guyatt GH, Jaeschke R, Reeve J, Spanier A, King D, Molloy W, Willan A, Streiner DL, for the Canadian Critical Care Trials Group

Reference

JAMA 1995; 273: 703–708

Abstract

Objective: To examine the attitudes of health care workers regarding the withdrawal of life support.

Design: Cross-sectional survey.

Participants: Attending staff, house staff, and intensive care unit (ICU) nurses in 37 Canadian university-affiliated hospitals.

Main Outcome Measures: Health care workers’ ratings of the importance of 17 factors considered in the decision to withdraw life support, and their ratings of five levels of care, ranging from comfort measures to intensive care, in two of 12 different clinical scenarios.

Results: We surveyed 1361 respondents (149 of 167 potentially eligible ICU attending staff, 142 of 173 ICU house staff, and 1070 of 1455 ICU nurses, with response rates of 89%, 82% and 74% respectively). The most important factors were likelihood of surviving the current episode, likelihood of long-term survival, premorbid cognitive function, and age of the patient. In choosing the level of care for the patient scenarios, the same option was chosen by more than 50% of respondents in only one of 12 scenarios; opposite extremes of care were chosen by more than 10% of the respondents in eight of 12 scenarios. Respondent characteristics affecting choices included the number of years since graduation, the city and province in which they worked, the number of beds in their ICU, and their assessment of the likelihood that they would withdraw life support in comparison with their colleagues (p<0.001 for all comparisons).

Conclusions: While ICU health care workers consistently identify a number of patient factors as important in decisions to withdraw care, there is extreme variability, which may be explained in part by the values of individual health care providers.

Summary

A cross-sectional survey of attending staff, house staff, and ICU nurses in 37 Canadian university-affiliated hospitals was performed to examine the attitudes of health care workers regarding the withdrawal of life support in the critically ill. Factors that were varied in the 12 scenarios were age (45 vs 75 years), premorbid cognitive function (highly functional vs encephalitis or Alzheimer’s disease), likelihood of surviving current episode (50% vs 90% mortality), and likelihood of long-term survival (50% 1-year mortality vs no underlying comorbidity affecting long-term survival). Scenarios were created in which the patient, family, or friends could not help with a decision, and health care workers’ attitudes were assessed. A total of 1361 health care workers in 37 Canadian hospitals in 8 provinces responded. The 10 top determinants of withdrawal of life support were likelihood of surviving the current episode, patient advance directives, premorbid cognitive function, likelihood of long-term survival, family directives, premorbid physical function, age, risk of legal complications,
hospital policy, and compliance with medical care. The variability in responses to every sce-
nario was striking. The respondent variables that were significantly associated with the level of care chosen in the scenarios were the number of years since graduation, the number of ICU beds, province, and city. The determinants of withdrawal that proved to be significant predictors of the level of care in the multiple regression analysis were likelihood of long-term survival, and premorbid physical function. All four primary factors that were varied in the scenarios (age, likelihood of surviving current illness, long-term survival, and premorbid cognitive function) proved significant in multivariate analyses.

Related references


Key message

Although ICU health workers consistently identify specific variables as important in deciding to withdraw care, there is extreme variability in their decision-making which appears to be explained by the values and beliefs of the care provider, rather than the patient or surrogate decision-maker.

Why it’s important

Although patient autonomy is stressed throughout North America, the present study emphasizes the fact that end-of-life care for a given patient is determined more by the individual health care worker’s values than the patient’s. It is the first study to document the diversity of approaches to decision-making among different professionals.

Strengths

1. The development of a reliable and validated instrument, using a rigorous methodology with a high response rate.
2. The multi-center national perspective, including ICU doctors and nurses.

Weaknesses

1. Questionnaire which assessed what health care workers stated they would do, rather than observing their actual practice.
2. Patient directives, family wishes, or the complex interplay between these and other factors were not addressed.

Relevance

Because of the marked variability in health care provider decision-making at the end of life, the same patient with the same disease and prognosis may receive full aggressive intensive care from one health professional, and only comfort measures from another.
A controlled trial to improve care for seriously ill hospitalized patients: the study to understand prognoses and preferences for outcomes and risks of treatments (SUPPORT)

The SUPPORT principal investigators – Connors AF, Dawson NV, Desbiens NA, Fulkerson WJ Jr, Goldman L, Knaus WA, Lynn J, Oye RK

JAMA 1995; 274: 1591–1598

Objectives: To improve end-of-life decision making and reduce the frequency of a mechanically supported, painful, and prolonged process of dying.

Design: A 2-year prospective observational study (phase I) with 4301 patients, followed by a 2-year controlled clinical trial (phase II) with 4804 patients and their physicians randomized by specialty group to the intervention group (n = 2652), or control group (n = 2152).

Setting: Five teaching hospitals in the United States.

Patients: A total of 9105 adults hospitalized with one or more of nine life-threatening diagnoses; an overall 6-month mortality rate of 47%.

Intervention: Physicians in the intervention group received estimates of the likelihood of 6-month survival for every day up to 6 months, outcomes of cardiopulmonary resuscitation (CPR), and functional disability at 2 months. A specially trained nurse had multiple contacts with the patient, family, physician, and hospital staff to elicit preferences, improve understanding of outcomes, encourage attention to pain control, and facilitate advance care planning and patient-physician communication.

Results: The phase I observation documented shortcomings in communication, frequency of aggressive treatment, and the characteristics of hospital death: only 47% of physicians knew when their patients preferred to avoid CPR; 46% do-not-resuscitate (DNR) orders were written within 2 days of death; 38% of patients who died spent at least 10 days in an ICU; and for 50% of conscious patients who died in the hospital, family members reported moderate to severe pain at least half the time. During the phase II intervention, patients experienced no improvement in patient-physician communication (e.g., 37% of control patients and 40% of intervention patients discussed CPR preferences), or in the five targeted outcomes, i.e., incidence or timing of written DNR orders (adjusted ratio, 1.02; 95% confidence interval [CI], 0.90 to 1.15), physicians’ knowledge of the patients’ preferences not to be resuscitated (adjusted ratio, 1.22; 95% CI, 0.99 to 1.49), number of days spent in an ICU, receiving mechanical ventilation, or comatose before death (adjusted ratio, 0.97; 95% CI, 0.87 to 1.07), or level of reported pain (adjusted ratio, 1.15; 95% CI, 1.00 to 1.33). The intervention also did not reduce use of hospital resources (adjusted ratio, 1.05; 95% CI, 0.99 to 1.12).

Conclusions: The phase I observation of SUPPORT confirmed substantial shortcomings in care for seriously ill hospitalized adults. The phase II intervention failed to improve care or patient outcomes. Enhancing opportunities for more patient-physician communication, although advocated as the major method for improving patient outcomes, may be inadequate to change established practices. To improve the experience of seriously ill and dying patients, greater individual and societal commitment, and more proactive and forceful measures may be needed.
Summary

The observational study took place from June 1989 to June 1991, and the controlled clinical trial from January 1992 to January 1994, in patients with a predicted 6-month mortality of approximately 50%. Serious problems were noted in hospitalized patients at the end of life, including considerable pain, poor communication between physicians and patients, and lack of implementing patients’ wishes. In phase I, 49% patients who wanted CPR withheld did not have a DNR order written. Substantial variation in outcomes was found among physicians, and across the five institutions. Physicians received at least one prognostic report for 94% of patients, and at least one report of patient or surrogate understanding and preferences in 78% of cases. The intervention did not change the proportion of patients or surrogates reporting a discussion about CPR (37% control vs 40% intervention). Of patients who did not have such a discussion, 41% of each group said they would like to discuss CPR. In the second physician interview, 59% acknowledged receiving the prognostic reports, and 34% the preference reports. Only 15% of doctors reported discussing the specific information with patients or family. Most patients and families indicated that they were satisfied, no matter what happened. An intervention to improve end-of-life decision-making by providing physicians with prognostic information and patient preferences was ineffective.

Citation count 1080

Related references


Why it’s important

The SUPPORT study documents serious problems in end-of-life care in hospitalized patients. Providing physicians with more information concerning patients’ prognoses and preferences will not change physician behavior in improving end-of-life care.

Strengths

1. Rigorous scientific method in an extremely complex project.
2. A large number of patients in five diverse hospital settings.
3. An important baseline period and good response rates.

Weaknesses

1. Despite significant time, efforts, and costs, the authors were unable to show an improvement in physician behaviour.
2. Inadequate communication, not implementing patients’ previous wishes, and dying in an ICU are not necessarily indicative that what was best for the patient was not achieved.
Relevance

End-of-life decisions are made daily in hospitalized patients. Physicians must become more sensitive to their inadequacies in providing end-of-life care, and become more sensitive to patients’ needs.
Title

Consensus report on the ethics of foregoing life-sustaining treatments in the critically ill

Author

Task Force on Ethics of the Society of Critical Care Medicine

Reference

Crit Care Med 1990; 18: 1435–1439

Abstract

None

Summary

A consensus statement pertaining to critically ill patients and the issues involved in foregoing life-sustaining treatments was developed. Issues including the spectrum of foregoing treatment, decision-making capacity, and the lack of decision-making capacity were addressed. The patient or the patient's surrogate is the source of authorization for decisions to treat or not. Advance directives should be actively and prospectively solicited. Both preservation of life and quality of life must be weighed when making decisions concerning withholding and withdrawing life-sustaining treatments. A patient may judge that it is preferable to forgo therapy than to receive it, or clinicians may judge that major goals of therapy are unachievable. A decision to withdraw a treatment already initiated should not necessarily be ethically regarded as more problematic than a decision not to initiate a treatment. Any treatment derives its medical justification from the benefits that the informed patient and the physician hope to achieve by employing it.

Forgoing therapy should be discussed when the patient has a diagnosis with a grave prognosis, when the burdens of therapy outweigh the benefits, and when the quality of the patient's life is expected to be unacceptable to the patient. The health care professional has no obligation to offer, begin, or maintain a treatment which in his best judgement will be physiologically futile. As in all clinical decision-making, effective communication between the patient, the patient's family or surrogate, and the health care team is of paramount importance. Patients, families, and surrogates should be regularly included in discussions and decisions regarding therapy. While the patient still has the capacity to make decisions during the course of a grave illness, or when the patient is facing the prospect of a risky course of treatment, it is ethically appropriate and prudent to initiate discussions regarding potential limitations on therapy.

In a decision to withhold or withdraw therapy, there are no intrinsic moral differences between the categories of treatments such as CPR, ventilatory support, medications such as vasopressors, antibiotics, and insulin, and the provision of nutrition and hydration by artificial means. A minority dissent classified hydration and nutrition outside of medical interventions. Treatment decisions should be considered in the context of the goals of the total treatment plan for the patient, rather than in isolation. The continued efficacy and justification for any ongoing course of therapy should be re-evaluated at appropriate intervals in light of changing conditions. Unlike a decision to initiate life-sustaining procedures – which must often be made as an emergency to permit a full evaluation of the patient's condition, and a knowledgeable assessment of the likely benefits of available treatments – a decision to withdraw a life-sustaining treatment should be made only after deliberate
consideration of the ethical factors involved. Treatments that offer no benefit and serve to prolong the dying process should not be employed. The removal of life support from a patient should not be regarded as abandonment of the patient. Health care professionals have the obligation to continue supportive care and treatment for pain and suffering.

Decision-making capacity includes the following abilities: to appreciate the significant characteristics of one's condition; to appreciate the impact of the main treatment options; to judge the relationship of options to one's beliefs and values; to reason and to deliberate about one's choices, and to communicate decisions in a meaningful manner. The wishes of an informed adult patient who has the capacity to make decisions should be the primary and most weighty consideration in almost all decisions regarding treatment. When patients are deemed to lack decision-making capacity, and surrogates are involved, decision-making usually rests with the family or close associates. Mechanisms for dispute resolutions are also provided.

Citation count None

Related references


Key message

A consensus has developed that when treatments offer no benefit and serve to prolong the dying process, they may be withheld or withdrawn.

Why it’s important

The present consensus report was the first to be developed for the forgoing of life-sustaining treatments in critically ill patients by a multi-disciplinary group of experts in medicine, especially in critical care medicine, law, ethics, philosophy, religion, and patient advocates.

Strengths

The development of consensus regarding the forgoing of life-sustaining treatments covering several controversial areas.

Weaknesses

Consensus could not be reached related to hydration and nutrition being medical interventions.

Relevance

Consensus reports related to medical, ethical, legal, and religious issues are extremely important for developing standards of practice and statements for legal opinions.
Title

A definition of irreversible coma

Author


Reference

JAMA 1968; 205: 337–340

Abstract

None

Summary

The characteristics of a permanently non-functioning brain were determined to define irreversible coma as a new criterion for death. The condition can be satisfactorily diagnosed by (1) unreceptivity and unresponsivity, (2) no movements or breathing, and (3) no reflexes. A fourth confirmatory test is a flat electroencephalogram. All of the above tests shall be repeated at least 24 hours later, with no change to provide evidence of the irreversibility of the condition. The validity of such data as indications of irreversible cerebral damage depends on the exclusion of two conditions: hypothermia (temperature < 90°F [32.2°C]), or evidence of drug intoxication, such as barbiturates. It is suggested that the physician in charge of the patient consult with one or more other physicians directly involved before the patient is declared brain dead on the basis of these criteria. It is further suggested that the decision to declare the patient dead, and then to turn off the respirator, be made by physicians not involved in any later effort to transplant organs or tissues from the deceased individual. Irreversible coma can have various causes, including cardiac arrest, asphyxia, massive brain damage, and intracranial lesions – neoplastic or vascular.

Two reasons for the need for a new definition of death (1) improvements in resuscitative and supportive measures can lead to patients whose heart continues to beat, but whose brain is irreversibly damaged, and (2) obsolete criteria for the definition of death can lead to controversy in obtaining organs for transplantation.

Citation count 105

Related references


**Key message**

A patient with a permanently non-functioning brain and irreversible coma can be diagnosed clinically. Physicians should use irreversible coma as a new criterion for death.

**Why it’s important**

This report is the precedent for the medical and legal consensus that has led to the acceptance of brain death.

**Strengths**

Authoritative statement made by leading experts from the Harvard Medical School and the Massachusetts General Hospital.

**Weaknesses**

The report provides no objective data confirming that the proposed clinical criteria for irreversible coma and a permanent non-functioning brain are synonymous with death.

**Relevance**

The use of brain death criteria as additional medical and legal criteria to define death is accepted worldwide, and has significantly increased organ transplantation.