ORIGINAL ARTICLES

Conflict Associated with Decisions to Limit Life-sustaining Treatment in Intensive Care Units

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OBJECTIVE: To determine the incidence and nature of interpersonal conflicts that arise when patients in the intensive care unit are considered for limitation of life-sustaining treatment.

DESIGN: Qualitative analysis of prospectively gathered interviews.

SETTING: Six intensive care units at a university medical center.

PARTICIPANTS: Four hundred six physicians and nurses who were involved in the care of 102 patients for whom withdrawal or withholding of treatment was considered.

MEASUREMENTS: Semistructured interviews addressed disagreements during life-sustaining treatment decision making. Two raters coded transcripts of the audiotaped interviews.

MAIN RESULTS: At least 1 health care provider in 78% of the cases described a situation coded as conflict. Conflict occurred between the staff and family members in 48% of the cases, among staff members in 48%, and among family members in 24%. In 63% of the cases, conflict arose over the decision about life-sustaining treatment itself. In 45% of the cases, conflict occurred over other tasks such as communication and pain control. Social issues caused conflict in 19% of the cases.

CONCLUSIONS: Conflict is more prevalent in the setting of intensive care decision making than has previously been demonstrated. While conflict over the treatment decision itself is most common, conflict over other issues, including social issues, is also significant. By identifying conflict and by recognizing that the treatment decision may not be the only conflict present, or even the main one, clinicians may address conflict more constructively.

KEY WORDS: conflict (psychology); terminal care; decision making; life support care; resuscitation orders.

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Conflicts associated with decisions about withholding or withdrawing life-sustaining treatment have received a great deal of publicity. While some cases such as those involving Karen Ann Quinlan and Nancy Cruzan end up in court and the media, most conflicts related to end-of-life decision making do not involve the legal system. Nonetheless, health care providers are frequently confronted with them during every day practice. Even without legal action, these conflicts can have serious consequences. They may negatively affect the quality of decision making and patient care, as well as the satisfaction of both family members and health care providers. ¹

Despite the importance of conflict during end-of-life decision making, little is known about its prevalence, causes, and effects. The existing literature focuses primarily on the problems of nurse-physician conflict ^{2,3} and nurse-family conflict,4 and emphasizes coping mechanisms for nurses rather than improving patient care. 5-7 Two small studies have looked at the conflicts between resident physicians and attending physicians, 8,9 and disagreement between physicians and patients or family members has been identified in several series of hospitalized patients. 10-13 Others have provided details about the human element of high technology in the setting of intensive care. 14,15 However, conflict was not the main focus of these studies, and information about the occurrence of conflict was assessed through limited means such as chart review or questionnaires filled out by a single physician.

To address these shortcomings in the literature, we studied intensive care unit patients for whom withholding or withdrawing treatment was considered. Interviewing primary nurses and physicians from each case, we analyzed the incidence, nature, and participants of conflicts. Describing these situations is essential in identifying whether and how to address them.

METHODS

Subjects

We identified 102 consecutive cases in the 6 adult intensive care units at Duke University Medical Center during a 10-week period in the autumn of 1996. The cases included all patients who were considered for the

withdrawal or withholding of life-sustaining treatment. Life-sustaining treatment was defined as ventilation, cardiac defibrillation, vasopressors, surgery, feeding, antibiotics, insulin, dialysis, and intravenous fluids. Cases were identified through the charge nurse and rounding physicians in each unit. The case inclusion criteria were admission to the intensive care unit during the study period, age over 17 years, and the occurrence of a formal discussion about withdrawal or withholding of life-sustaining treatment. ¹⁶

After case identification, 2 primary physicians and 2 primary nurses were identified for each patient. These providers must have directly cared for the patient and participated in the discussions to withdraw or withhold lifesustaining treatment. Of the 2 physicians interviewed for each case, at least 1 had to be an attending physician or fellow.

Measurements

After the patient died or was transferred out of the intensive care unit, each identified physician and nurse was interviewed in person or by telephone. The interviews consisted of both structured and open-ended questions, and focused on the presence of any disagreement or conflict regarding the decision to withhold or withdraw life-sustaining treatment. All interviews were audiotaped and transcribed. Through chart review, health and demographic information was collected for each patient. Demographic information was also collected from physicians and nurses.

Analysis

All interview transcripts were coded. We developed the code book through an iterative process. 17,18 First, we created general coding categories based on pertinent topics identified in the literature on conflict theory. 19-21 These categories included the participants in conflicts, types of conflicts, and causes of conflicts. We read the study transcripts to see how well the coding categories captured the conflicts described in the interviews and adapted the categories accordingly. Using this draft code book, 2 researchers coded a subset of 10 transcripts to identify problems. Kappa scores were used to measure interrater reliability, and codes with low scores were revised or dropped, as appropriate. The final code book contained 12 items spanning 5 topic areas (instrument available from the Program on the Medical Encounter and Palliative Care website: http://hsrd.durham.med.va.gov/pmepc/ program.html).

Using the final code book, 2 raters independently coded the transcripts for all 102 cases. Final κ scores for all codes ranged from 0.4 to 0.7, demonstrating good agreement. Disagreements in coding were resolved by consensus between the 2 coders. Conflict was defined as "disagreement between people when a decision must be made or an action taken." The definition excluded the internal psychic conflict of individuals. Situations were not coded

as conflict if participants disagreed in retrospect with a decision or disagreed with a decision made before they became involved in the case. References to the emotional distress inherent to working in the intensive care setting or to families wanting time before implementing an end-of-life decision did not qualify as conflict. To determine the incidence of cases with conflict, the coding results from all 4 interviews for each case were grouped together. If conflict was identified by 1 or more respondents, the case was considered to have conflict.

We classified the participants in each conflict using 3 codes: family-family conflict (between or among the family, friends, or the patients themselves), Staff-family conflict (between staff and patient or family), and staff-staff conflict (among staff members only). We classified the cause of the conflict as: treatment decision, referring to conflict over the specific task of deciding which treatment option was best; other task, referring to conflict over other issues such as the

Table 1. Characteristics of Patients and Health Care Providers*

	Patients (%)	Health Care Providers (%)	
N	102	406	
Age, y			
<50	23 (23)	396 (98)	
	55 (54)	6 (2)	
>70	24 (24)	0 (0)	
Gender			
Male	63 (62)	177 (44)	
Female	39 (38)	159 (40)	
Race	• •	• •	
White	64 (63)	346 (85)	
African American	35 (34)	7 (2)	
Other	3 (3)	50 (12)	
Marital status	- (-)	,	
Single/divorced/separated	20 (20)	151 (37)	
Married	64 (63)	251 (62)	
Widowed	12 (12)	0 (0)	
Religion	,	. (.,	
Protestant	56 (55)	164 (40)	
Catholic	3 (3)	109 (27)	
Other/none	4 (4)	129 (32)	
Intensive care unit	. ,	- (- ,	
Surgical	21 (21)	_	
Neurological	16 (16)	_	
Medical	65 (64)	_	
Primary diagnosis for patient	,		
Respiratory failure	25 (24)	_	
Neurological	22 (22)	_	
Postsurgical	22 (22)	_	
Malignancy	21 (21)	_	
Cardiac	12 (12)	_	
Professional status	` ,		
Attending physician	_	70 (17)	
Fellow	_	59 (15)	
Resident	_	74 (18)	
Nurse	_	203 (50)	

^{*} Percentages do not always total 100% because respondents were guaranteed anonymity and not all information was supplied to the interviewers.

Table 2. Prevalence and Characteristics of Conflict

Code	Cases (%) N = 102
Conflict	80 (78)
No conflict	22 (22)
Participants	
Family-family	24 (24)*
Staff-family	49 (48)*
Staff-staff	49 (48)*
Issue	
Treatment decision	64 (63)*
Other task	46 (45)*
Social	19 (19)*

^{*} Totals more than 78% because more than 1 conflict was possible per case.

decision-making process, communication, and pain control; and *social*, referring to conflict over staff or family behavior, or assignment of blame for the patient's situation.

Demographic data were analyzed using descriptive statistical methods. Informed consent was obtained from all respondents, and the study was approved by the Duke University Medical Center Institutional Review Board.

RESULTS

We identified 102 patients for the study, and 406 health care providers were interviewed (Table 1). A final decision was made to withdraw life-sustaining treatment for 64% of the patients, to withhold life sustaining treatment for an additional 28%, and to continue all medical treatment for 8%. Most (93%) of the patients died during the hospitalization; 7% were discharged to home or another facility.

Overall Incidence of Conflict

At least 1 conflict was present in 78% of the cases (Table 2). In 25% of the cases, a majority of the health care providers (3 or 4 out of 4) interviewed described conflict; in 23% of the cases, 2 of the 4 providers noted conflict; and in 31% of the cases, 1 provider perceived conflict. Details of

Table 3. Details of Selected Cases with Conflict

Case	Provider Reporting Conflict	Coding	Details of Conflict(s)	Decision
25	RN	Staff-staff, decision	Nurse disagreed with physician's decision to add antibiotics after other treatment had been withheld	Withhold
41	RN	Staff-staff, other task	Nurse disagreed with the way physician communicated poor prognosis to family	Withdraw
26	RN, MD	Staff-family, decision	Staff and patient's daughter disagreed over treatment decision and importance of quality of life; staff eventually stopped trying to convince her to limit treatment	Continue; discharged
37	RN, RN	Staff-family, decision	Family had long disagreement with staff over whether to have exploratory surgery and then agreed to it	Withhold
	Staff-staff, decision	Surgeons and medical staff disagreed over the operation; DNR in end		
16	RN, RN, MD	Family-family, decision	Patient and husband agreed to withhold but patient's sons disagreed with them	Withhold
		Staff-staff, other task	Nurses and physicians disagreed over pain control	
51	51 RN, RN, MD	Family-family, decision	Family had difficulty agreeing to withdraw among themselves	Withdraw
		Staff-family, social	Family was suspicious of racial bias (family was African-American and no one on staff was)	
39	RN, RN, MD, MD	Staff-family, decision, other task and social	Family initially refused to withdraw; physician had conflict over communication with family and questioned their motives	Withdraw
		Staff-staff, decision	Nurse disagreed with physician's order for labs and blood products for patient with DNR order	
52	RN, RN, MD, MD	Family-family, decision and social	Children of patient disagreed about decision to withdraw and had personal disagreements; distant child was confrontational with staff and disagreed with recommendation to withdraw	Withdraw
		Staff-family, decision, other task, and social	Staff had conflict with family because of legal concerns about distant child's role	

selected cases showing the range and variety of conflicts are presented in Table 3.

Although health care providers within each case often agreed about the presence and severity of conflict, widely disparate views were also frequently noted. For example, in one case, both nurses reported significant conflict with the attending physician over the decision. One nurse considered quitting to avoid facing the same situation again. However, neither physician in this case reported any conflict. The intensity of conflict ranged from disagreements that were quickly resolved through discussion, to conflicts that lead to the involvement of the ethics committee (1 case), and risk management (at least 3 cases).

Participants in Conflicts

Conflict between staff and family members was identified in 48% of the cases and conflict among staff members in 48% of the cases. Conflicts among family members were identified less often—24% of cases.

Staff-family conflict typically involved physicians and 1 or more family members. Nurses were more often involved when there were social as well as treatment issues in conflict. An attending physician reported the following situation in which the family members had a conflict with the staff—the physicians in particular—over communication:

The resident walked out to get consent to change her central venous catheter, and came back in, and said, "Boy, they are really mad." And I said, "What are they mad at?" And he says, "Oh, they think we're just practicing on her or something like that." ... After we finished rounds, I went out and talked to them. They brought it up immediately, that she was HIV-positive, and she had this tumor, and they didn't think she could ever be cured, and they, the sister specifically, was very aggressive about wanting to withdraw care. I got the sense that the sister had been kind of frustrated about the communication or lack thereof during the course of her hospitalization, and she kept saying, "I feel like I've gotten the 'run around'," and I kept trying to say, "What do you mean by 'run around'?" And you know, she never could give me any specific answers, but the sense I got is that she felt that the people had not been honest with them, or forthright with them, about the patient's prognosis.

In this case, the attending physician spent a long time talking with the family members and addressing their concerns, and they soon were in agreement to withdraw. Staff-family conflict also occurred between a patient and staff members because the patient did not want to have resuscitation withheld.

Conflicts between staff members sometimes involved physicians from the primary team and the intensive care unit team. A nurse reported this example of staff-staff treatment decision conflict:

There was a conflict, because there were 2 different attending (physicians) there, 1 from CCU (cardiac care unit) and 1 from oncology. And they had different treatments, they had different goals.

Most often, staff-staff conflict involved participants at different levels in the hospital hierarchy, such as resident and attending physicians, or nurses and physicians. In one case, a nurse and a resident disagreed with the fellow. The nurse and resident wanted to limit treatment based on futility, although the family could not be reached. The nurse said:

And I was pouring blood products into him. Which, at that point, I was beginning to disagree with, because there were a lot of valuable resources going into this, with no chance of him living through this. Because if we were unable to get family, then a decision I think could have been made by the medical staff based on the futility of treatment at that point. I really feel that sometimes the doctors may need to take more of (an active role in the) decision-making process.

Conflict between nurses was rarely reported.

Family conflicts were also identified, although with lesser frequency. Usually the treatment decision itself was the cause of the conflict, as different family members disagreed about what was best for the patient. This quote, reported by a physician, was typical:

But there were some members of the family who were in favor of withdrawing the ventilator. There were other members of the family who were not in favor of withdrawing the ventilator.

Three family conflicts occurred between the patient and other family members because the patient wanted to stop receiving aggressive treatment.

Subjects of Conflicts

In 63% of the cases, the most frequently identified subject of conflict was the decision to withdraw or withhold treatment. With respect to staff-family conflict, this category included cases in which staff members preferred a more aggressive approach (76% of staff-family conflicts) as well as cases in which the families wanted to continue aggressive treatment (24% of staff-family conflicts). In one case, the staff wanted to limit ventilator use based on the patient's prior quality of life and poor prognosis after a stroke. The patient had incorrectly been given a poor prognosis during a previous illness. As a result, the family was unwilling to limit treatment based on prognosis. After several meetings between the staff and family, the family reluctantly agreed to follow the medical staff's plan. In another case, the family thought that further treatment was futile, but the attending physician wanted to continue aggressive treatment. Both nurses and a resident reported this staff-family treatment decision conflict, described here by a nurse:

It seemed as if the family was on another wavelength than the (attending) physician was. The family was seeing that the patient was dying in front of their eyes, and the physician was still perceiving that it wasn't futile treatment but still continuing on.

Staff-staff conflict was also present in this case, as the nurses and resident favored limiting life-sustaining treatment and disagreed with the attending physician. Staff-staff conflict over the treatment decision sometimes involved the prognosis or the appropriate treatment given an accepted prognosis.

Conflict in the other task category was demonstrated in 45% of cases. This category most frequently involved staff-staff conflict over issues of communication, the decision-making process, or pain control. For example, a nurse reported staff disagreement about pain control:

There was some conflict medically and nursing-wise about how much morphine to give her. They (the doctors) didn't really want us giving her too much medicine, and we (the nurses) said that we want to keep her comfortable.

Misunderstanding the meaning of a do-not-resuscitate (DNR) order also caused conflict, as in this case reported by a nurse who thought DNR meant comfort care only:

So it was hard for me to see that the DNR didn't mean the same thing for (the physician) that it does to me ... I got very upset when I had to take (the patient) downstairs for a CT scan.

Staff-family conflict in the other task category primarily occurred over communication problems. In one case, the extended family did not want the patient's husband to know the gravity of the situation, although they did say he should make the decision about withdrawal. An additional barrier was created because he could not speak English. One physician described it this way:

The family insisted that the patient's husband make a decision about whether or not to withdraw. But, he didn't speak English ... And they would not let me get an independent interpreter, they insisted that everything that I talked to the husband about go through the grandchildren. And the grandchildren, I'm sure, were not telling him the same thing that I was telling the grandchildren, because they even told me in fact that they didn't want him to know how bad things were. So it made it almost impossible to get a decision to withdraw on her.

This case also involved staff-staff other task conflict, because there was disagreement over how to overcome the communication and cultural barriers, and staff-family treatment decision conflict, because the staff wanted to withdraw.

Social conflicts developed in 19% of cases over issues of personal behavior or blame. In several cases, staff members were frustrated by families that did not visit often, yet requested that all life-sustaining treatment be continued. A nurse described this situation:

He wasn't healing any ... There were a lot of negative feelings because they (the family) were really never around, yet they wanted everything done.

Such conflicts were also coded as treatment decision conflicts. A nurse described another situation in which blame caused social conflict:

The family felt that (the hospital) as a research institution should have the answer to the problem ... So it was very difficult for them to deal with, and for several days ... the

family still was very angry and expressing a lot of negative feelings about the hospital because we couldn't save him.

Several social conflicts occurred within families because of underlying family dynamics, as this physician reported:

There was dissension between family members. There was a lot of baggage that they came in with, a lot of family conflicts, and they used it as a forum for control issues, as in who was gonna make what decision and who proves to mom that they loved her more and that sort of thing. That was a problem.

Social conflicts among staff members were rarely identified.

DISCUSSION

Health care providers perceived conflict in 78% of the cases of decision making for critically ill patients. Although no other study has been specifically designed to assess the prevalence of conflict, this figure is significantly higher than noted in previous studies. For example, Smedira¹¹ found that fewer than 10% of families disagreed initially with a recommendation to limit support. In a study of medicine inpatients based on physician report, Lo¹⁰ found that 4% of patients and family members disagreed with a recommendation for a DNR order and 3% of families had disagreement among themselves. Prendergast and Luce¹² examined the time it took to reach agreement as a surrogate marker for both staff-family and staff-staff conflict. They found that, in 16% of cases, the primary care team and the critical care team were delayed in agreeing to present the family with a recommendation to limit life-sustaining treatment. Once a recommendation was made, 39% of patients or surrogates failed to agree immediately to limit treatment. Whether these delays were caused by conflict is not known. In our study, definite disagreement between staff and family over the treatment decision was present in 33% of the cases (this included both families who disagreed with a recommendation to limit treatment and families who wanted to limit treatment but met with staff disagreement).

There are several possible reasons why we found a much higher rate of conflict than previous studies. First, we used interviews rather than surrogate markers or chart reviews to identify conflict. Second, we interviewed 4 providers per case. This increased the likelihood of talking with someone who perceived conflict. Third, we spoke to both nurses and physicians. Nurses bring a perspective that may be more closely aligned with the patient or family. ^{1–4,23} Fourth, we did not rely on individual interpretations of what qualified as conflict but instead applied an external definition. This definition did not limit conflict to those situations in which action was delayed because of disagreement or in which a decision was made in spite of ongoing objections by 1 or more parties. Furthermore, the conflict did not have to be openly discussed by the involved parties.

Conflicts over the actual life-sustaining treatment decision have received the most attention in the literature and were the most common cause of conflicts in this study (63% of cases). However, we also found that other tasks caused conflict in a significant number of cases (45%). These other tasks included communication to family members, communication among staff, communication among family members, pain control, and the process of decision making. One common problem occurred when staff members, despite agreeing about the treatment decision, disagreed about how to discuss the situation with family members. Jezewski⁵ also found that health care providers had disagreements about the timing of or approach to obtaining family consent. Poor communication created problems when all staff members did not understand the proposed care plan. Other research by Jezewski⁶ also supports the finding that conflict can derive from disagreement about whether a DNR order means "comfort care only."

Intrafamily conflict was identified in one quarter of the cases; staff-family or staff-staff conflict each occurred in nearly half of the cases. This difference may reflect a true difference in the incidence of conflict. Another explanation is that we spoke only with staff members. Staff members may be more aware of conflicts involving themselves and less aware of conflicts occurring within families. In a companion study of family perceptions of conflict, family members were aware of more family conflicts and fewer staff conflicts.²⁴

This study has several limitations. We did not have codes for the severity of conflict. Indeed, they ranged from disagreements lasting a few hours or a day to conflicts that continued to the patient's death and beyond. For staff-family conflicts, it was also difficult to determine whether the family merely needed a little time to prepare for the patient's death before agreeing to withdraw treatment. Finally, this study was limited to patients in intensive care units. Less conflict may exist during end-of-life decision making in other settings, such as the regular ward, clinic, and home.

Although we report a high frequency of conflict during decisions to withhold or withdraw life-sustaining treatment, we do not presume that conflict is necessarily bad. Just as there is constructive criticism, there can be constructive conflict. For example, when staff members disagree on the appropriate level of treatment, each side may have legitimate concerns that need to be addressed. In addition, the patient's condition may be changing or uncertain, making a decision difficult. Disagreement over the decision between the family and staff may reflect deepseated differences in values. Levine and Zuckerman²⁵ warn against the tendency to label involved, vocal families as "trouble." A period of dissent may be necessary for both sides to appreciate the other's perspective and to find accommodation. Conflict between patients and physicians has also been proposed as an essential step in breaking paternalistic behavior patterns. 26,27 Lack of appropriate conflict may contribute to the "illusion of patient choice" described by Orentlicher.²⁸

These data provide clinicians with several take-home lessons to improve decision making for critically ill patients. First, given the high levels of conflict and the variability in perception of conflict among different staff members, clinicians should strive to recognize conflict so that it can be dealt with constructively. Second, many of the disagreements we identified were not caused directly by different opinions about limiting treatment. Physicians facing a conflict-filled situation should try to determine whether the conflict is actually rooted in a difference of opinion about life-sustaining treatment, or whether it is caused by miscommunication, personality conflict, or unaddressed emotional or social issues.²⁹⁻³¹ Efforts can then be directed at resolving the particular issue at hand. Third, health care providers should try to identify potentially conflict-ridden situations to prevent discord. Keeping families informed about the patient's response to therapy and what treatment options remain throughout a patient's illness may reduce the likelihood that families will be "blind-sided" by a request to limit treatment. "Preventive ethics" may help avert unproductive conflict and needlessly difficult decisions. 32,33

One of our cases illustrates these points. Early on, the staff recognized that there was staff-family conflict over personality and communication issues, and the initial therapy decisions. They used aggressive, consistent communication efforts to address the family's concerns. When the time came to make a decision about treatment withdrawal, the family trusted the staff, and there was no disagreement.

These findings suggest that much could be done to improve the culture of care and decision making in critical care units, and multiple resources are available to help. Dubler and Marcus²² provide a mediation approach to resolving bioethical disputes. Levine and Zuckerman²⁵ emphasize the goals of partnership and accommodation with families. Goold et al.³¹ focus on understanding the reasons behind the conflict and emphasize communication skills. For staff-staff conflicts, Edwards² outlines approaches that include calling care conferences, involving ethics committees, and using specific facts from the case at hand as well as published references, when appropriate.

The recognition that disagreements during life support decisions are frequent and varied is an important first step toward reducing the conflicts experienced by many doctors, nurses, and family members. Further research into the best ways to resolve conflicts is needed.

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REFERENCES

 Cameron M. Moral and ethical component of nurse-burnout. Nurs Manage. 1986;17:42B,42D,42E.

- Edwards BS. When the physician won't give up. Am J Nurs. 1993:93:34-7.
- 3. Forte PS. High cost of conflict. Nurs Econ. 1997;15:119-23.
- Kohr R, Creces L, Gray V, Warnock L. Defusing family conflicts. Nursing 1998;28:54–7.
- Jezewski MA. Do-not-resuscitate status: conflict and culture brokering in critical care units. Heart Lung. 1994;23:458–65.
- Jezewski MA, Finnell DS. The meaning of DNR status: oncology nurses' experiences with patients and families. Cancer Nurs. 1998;21:212–21.
- Jezewski MA, Scherer Y, Miller C, Battista E. Consenting to DNR: critical care nurses' interactions with patients and family members. Am J Crit Care. 1993;2:302–9.
- Shreves JG, Moss AH. Residents' ethical disagreements with attending physicians: an unrecognized problem. Acad Med. 1996;71:1103-5.
- Winkenwerder W. Ethical dilemmas for house staff physicians. The care of critically ill and dying patients. JAMA. 1985;254:3454–7.
- Lo B, Saika G, Strull W, Thomas E, Showstack J. 'Do not resuscitate' decisions: a prospective study at three teaching hospitals. Arch Intern Med. 1984;145:1115-7.
- Smedira NG, Evans BH, Grais LS, et al. Withholding and withdrawal of life support from the critically ill. N Engl J Med. 1990;322:309–15.
- Prendergast TJ, Luce JM. Increasing incidence of withholding and withdrawal of life support from the critically ill. Am J Respir Crit Care Med. 1997;155:15–20.
- Keenan SP, Busche KD, Chen LM, McCarthy L, Inman KJ, Sibbald WJ. A retrospective review of a large cohort of patients undergoing the process of withholding or withdrawal of life support. Crit Care Med. 1997;25:1324–31.
- Johnson D, Wilson M, Cavanaugh B, Bryden C, Gudmundson D, Moodley O. Measuring the ability to meet family needs in an intensive care unit. Crit Care Med. 1998;26:266–71.
- Cook DJ, Giacomini M, Johnson N, Willms D. Life support in the intensive care unit: a qualitative investigation of technological purposes. Canadian Critical Care Trials Group. CMAJ. 1999;161:1109–13.
- Abernethy AP, Tulsky JA. Disagreements that arise when making decisions about withdrawing or withholding life-sustaining treatment. J Gen Intern Med. 1997;12(suppl 1):101.

- Strauss AL, Corbin JM. Basics of Qualitative Research: Grounded Theory Procedures and Techniques. Newbury Park, Calif: Sage Publications; 1990.
- Crabtree BF, Miller WL. Doing Qualitative Research. Newbury Park, Calif: Sage Publications; 1992.
- Ellis DG, Fisher BA. Small Group Decision Making: Communication and the Group Process. 4th ed. New York: McGraw-Hill; 1994.
- Rahim MA. Managing Conflict in Organizations. 2nd ed. Westport, Conn: Praeger; 1992.
- Falk G. An empirical study measuring conflict in problem-solving groups which are assigned different decision rules. Hum Relations. 1982;35:1123–38.
- 22. Dubler NN, Marcus LJ. Mediating Bioethical Disputes: A Practical Guide. New York: United Hospital Fund of New York; 1994.
- Corley MC. Ethical dimensions of nurse-physician relations in critical care. Nurs Clin North Am. 1998;33:325–37.
- Abbott KH, Sago JG, Breen CM, Abernethy AP, Tulsky JA. Families looking back: one year after discussion of withdrawal/withholding of life sustaining support. Crit Care Med. 2001;29:197–201.
- Levine C, Zuckerman C. Trouble with families: toward an ethic of accommodation. Ann Intern Med. 1999;130:148–52.
- Katz J. The Silent World of Doctor and Patient. New York: The Free Press: 1984.
- Wolf SM. Conflict between doctor and patient. Law Med Health Care. 1988;16:197–203.
- Orentlicher D. The illusion of patient choice in end-of-life decisions. JAMA. 1992;267:2101–4.
- Nelson JL. Families and futility. J Am Geriatr Soc. 1994;42: 879–82.
- Lo B, Quill T, Tulsky J. Discussing palliative care with patients.
 ACP-ASIM End-of-Life Care Consensus Panel. American College of Physicians-American Society of Internal Medicine. Ann Intern Med. 1999;130:744–9.
- Goold SD, Williams B, Arnold RM. Conflicts regarding decisions to limit treatment: a differential diagnosis. JAMA. 2000;283: 909–14.
- Forrow L, Arnold RM, Parker LS. Preventive ethics: expanding the horizons of clinical ethics. J Clin Ethics. 1993;4:287–94.
- Dowdy MD, Robertson C, Bander JA. A study of proactive ethics consultation for critically and terminally ill patients with extended lengths of stay. Crit Care Med. 1998;26: 252-9.



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