# Organ Donation Terminology: Are We Communicating Life or Death?

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The continued functioning of organ transplantation depends on obtaining the permission of the next of kin. This communication process between medical or transplant professionals and a donor family hinges heavily on the understanding of certain critical terms like *brain dead*, *life support*, and *transplantation*. Communication issues in obtaining organ donation consent were examined, with particular focus on what are literally life-and-death decisions. Using an experimental simulation methodology, data are offered in support of the claim that much miscommunication occurs in such situations. Directions for improving such communication by allaying latent fears and more carefully defining crucial terminology are offered.

Key words: organ donation, decision making, brain death, transplantation organ

Although the vast majority of both the lay public and the professional sector hold positive dispositions toward organ donation (Manninen & Evans, 1985; Prottas & Batten, 1988), naivete and misconceptions still run rampant, in part due to poor communication between professionals and the public. The public has expressed concerns about the hastiness of organ removal, the disfigurement or mutilation of the body, and cynicism and general mistrust of doctors and the healthcare system (Corlett, 1985; Gallup Organization, Inc., 1983; McIntyre et al., 1987; Prottas, 1983). Physicians, nurses, and others likely to be involved in organ procurement show surprising ignorance and inconsistencies about the legal and medical criteria for determining death, particularly brain death (Prottas & Batten, 1988; Youngner, Landefeld, Coulton, Juknialis, & Leary, 1989). Laboratory behavioral research may have something important to contribute to clarifying some of these issues (Olbrisch, 1989; Perkins, 1987; Shanteau & Harris, 1990). The focus of this article is on issues of communication between the medical and transplant community and donor families, with particular focus on misunderstandings of the term brain dead.

In recent years, there has come to be increasing acceptance of a brain-oriented criterion for determining death as the "irreversible loss of all brain function" (Youngner et al., 1989, p. 2205). This determination can be made reliably by competent physicians. The prognosis is totally predictable and uniform; brain dead people never regain consciousness, much less any recovery, and suffer cardiovascular failure within a short time. The public's understanding of such terms may be absolutely pivotal in a decision to consent to donate the organs of a next of kin. (See Lamb, 1987, for a discussion of the development of the concepts of brain death and brainstem death.)

The present research investigated how the subjective perceptions of various terms important in an organ donation

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decision would affect a subject's recommendation to consent to donate the organs of a next of kin in several hypothetical organ donation cases. The study also explored the impact of providing brief, clear explanations for some of these misunderstood terms. The specific focus of this article is on the term brain dead, with more cursory attention to cremation, open casket, transplantation, and research.

The study used a methodology developed by Harris, Jasper, Shanteau, and Smith (1990) for a laboratory simulation of a scenario decision situation where a family is faced with the decision of whether to consent to donate the organs of a next of kin who has died tragically in an accident. By showing different subjects alternative versions of the same scenario, Harris et al. found that college-student subjects weighed the wishes of the deceased much more heavily than the wishes of the next of kin when those wishes were stated directly. The present study used this methodology to examine the communication issues surrounding the perception of the critical term brain dead and other terms and explanations important in the decision to donate organs of a next of kin. Although a laboratory simulation of such a problem clearly lacks full ecological validity, the degree of experimental control it permits can be a most useful way to easily identify some important variables, which may then be studied in more natural settings.

#### **METHOD**

#### Stimulus Materials

Twenty-three brief scenarios of 55 to 125 words were written. They were carefully divided to remove any story interaction biases into three groups of 8, 6, and 9 scenarios, respectively. Each of these groups was seen by a different sample of subjects. Each scenario described a situation whereby a young adult recently had died a tragic death and whose kin were now facing the decision of whether or not to consent to donate their loved one's organs. Each scenario had four versions,

identical except for a minor wording change in one detail focusing on a critical issue, attitude, or word.

For the purposes of this article, results from only 6 of the scenarios are discussed. The rest dealt with issues unrelated to the focus of this article and for our purposes may be considered as fillers. Two of the 6 scenarios dealt with the controversial and key medical term *brain dead*. In the first scenario, the terms *brain dead* and *dead* were systematically crossed with either no explanation at all or an explanation that the condition was one of permanent death with no chance of recovery. The second scenario was almost identical except that in all four versions the victim had signed an organ donor card. These 2 scenarios were each seen by different subject samples.

Another 2 scenarios dealt indirectly with the term *brain dead*. The first was a scenario manipulating the socioeconomic status of the victim. The second scenario was seen by a different sample and replicated the first but substituted *dead* for *brain dead*.

Following up on some other communication issues, another scenario orthogonally crossed (in a  $2 \times 2$  fashion) the type of funeral (cremation or open casket) with either no explanation at all or an explanation that organ donation would not disfigure the body. The final scenario of interest orthogonally varied the wishes of the deceased (victim signed donor card or victim chose not to sign donor card) with the designation of how the donated organs would be used (transplantation vs. research). A sample scenario in all four versions appears in Table 1.

#### Subjects and Procedure

The three samples tested 488, 395, and 288 students, respectively, from introductory psychology classes at Kansas State University. They participated as part of a course requirement and were recruited for a study in the "Evaluation of Moral Dilemmas." No mention on the sign-up sheet was made of organ donation. Most subjects, as well as the victims in the stories, were 18 to 25 years of age, which is the prime age of organ donors.

The design and procedure used with all three samples were identical, varying only in the particular scenarios seen. Subjects were told:

This experiment is part of an ongoing project on psychological aspects of organ donation. . . . This particular experiment today asks you to read several brief scenarios of hypothetical people in hypothetical situations where they face a moral dilemma and must make a choice about organ donation.

Subjects were then told to indicate whether they thought the surviving relatives should or should not agree to donate the organs of the deceased, or whether they were uncertain what that person should do. Next, subjects were asked to write down their reasons for their choice and were told:

# TABLE 1 Sample Stimulus: Story 5 (All Four Versions)

Version 1: cremation + no explanation

Bert Frederick, a foreman for a company based in Junction City, was killed this afternoon in a construction accident while supervising some workers at a company work site. Bert's family has a long-standing tradition of having their deceased loved ones cremated. Keeping this in mind, the Fredericks must now consider the possibility of donating Bert's organs. The transplant coordinator carefully explains to his parents that their permission is necessary before the organs may be taken. Should Bert's family give consent?

Version 2: cremation + explanation

Bert Frederick, a foreman for a company based in Junction City, was killed this afternoon in a construction accident while supervising some workers at a company work site. Bert's family has a long-standing tradition of having their deceased loved ones cremated. Keeping this in mind, the Fredericks must now consider the possibility of donating Bert's organs. The transplant coordinator carefully explains to his parents that organ removal does not disfigure the body in any way, and their permission is necessary before the organs may be taken. Should Bert's family give consent?

Version 3: open casket + no explanation

Bert Frederick, a foreman for a company based in Junction City, was killed this afternoon in a construction accident while supervising some workers at a company work site. Bert's family has a long-standing tradition of having open casket funerals. Keeping this in mind, the Fredericks must now consider the possibility of donating Bert's organs. The transplant coordinator carefully explains to his parents that their permission is necessary before the organs may be taken. Should Bert's family give consent?

Version 4: open casket + explanation

Bert Frederick, a foreman for a company based in Junction City, was killed this afternoon in a construction accident while supervising some workers at a company work site. Bert's family has a long-standing tradition of having open casket funerals. Keeping this in mind, the Fredericks must now consider the possibility of donating Bert's organs. The transplant coordinator carefully explains to his parents that organ removal does not disfigure the body in any way, and their permission is necessary before the organs may be taken. Should Bert's family give consent?

There are no right or wrong answers; we are only interested in how people approach these situations. Though we realize this may not be a pleasant topic to think about, we hope that the time spent on it in this experiment will help clarify your own knowledge and thinking about this very serious and increasingly important moral and medical issue.

Subjects were told to work at their own speed and to ask any questions that they had.

The answer booklet consisted of a demographic questionnaire and answer sheets to evaluate the stories. The demographic questionnaire gathered information on sex, ethnic background, education, college major, religion, and marital status, as well as information about the subjects' present attitude toward organ donation. Specifically, they were asked to check one of the following five choices in response to the question "Have you signed the back of your driver's license or another donor card indicating that you will donate organs after your death?": Yes; No, but I'd be willing to do so if asked; No, but I might consider doing so in the future; No, I thought about it and decided not to; and No, I didn't even know about it.

The scenarios themselves were presented at 3 to 4 stories per sheet. To partially counterbalance the order, each sheet of stories was read first by one third to one half the subjects. For each story, subjects checked Yes, No, or I'm undecided and then gave reasons for their decision. The answer sheet allowed about 1 in. to write reasons for their choice. Every subject read one, but only one, of the four versions of each scenario. Thus each version was read by approximately one fourth the subjects of the particular sample in which that scenario appeared. Subjects in the respective samples read one of the four versions of 8, 6, or 9 scenarios.

## **RESULTS**

The frequencies of Yes, No, and I'm undecided responses were tabulated for each story/scenario in each version. Confidence intervals for percentages referred to as follows were calculated using the following formula for proportions:

$$p \pm t \sqrt{pq/n}$$

where p= probability of success, q=1-p, t= critical t value from a standard table (in all cases we used a 95% confidence level, t=1.96), and n= number of subjects. Where appropriate, these confidence intervals appear in the tables in parentheses following the percentage.

Considering these data, some strong and consistent results appeared and are discussed later by the particular issue involved.

#### Brain Dead or Dead

Stories 1 and 2 examined the effect of clarification of the term brain dead. In Story 1, the terms brain dead and dead were orthogonally varied with either no explanation at all or an explanation that the condition was one of permanent death with no chance of recovery. The most surprising finding was

that an explanation accompanying the term brain dead produced a 76.3% rate of donation, whereas the same without an explanation created a donation rate of 76.0%, suggesting that a simple explanation did not increase donation. These results did not differ significantly from the choices to the other two versions of the scenario, both of which simply described the person as dead. In all four versions of the scenarios subjects basically had no other information to draw upon (i.e., signed donor card, attitudes, religion, etc.). In fact, the responses to these scenarios may reflect only the 80% or so of the population that Manninen and Evans (1985) found are favorably disposed to donating their organs on an a priori basis. Results appear in Table 2.

Story 2 was designed to give subjects a little more information in a brain dead scenario. It was very similar to Story 1, except that in all four versions the victim was described as having signed an organ donor card. The results also appear in Table 2. Even though there was a nonsignificant positive effect of providing an explanation, once again, there was no statistical difference between brain dead (91.7%) and brain dead with an explanation (98.6%), although there was clearly a ceiling effect. In comparing Stories 1 and 2, by far the most important factor was the wishes of the deceased. In Scenario 2, subjects appeared to be responding to the more salient information of a signed donor card, perhaps not even noticing the words brain dead. See Harris, Jasper, Lee, and Miller (1991) for more evidence and discussion of this issue.

Story 3 was not designed to focus specifically on the *brain dead* issue. Designed to look primarily at occupational status, the four versions described the victim as a young movie star, a corporate lawyer, a grade-school teacher, or a construction worker, in neighborhoods from posh and exclusive to deteriorating inner-city. This critical status manipulation did not make much difference. Decisions to donate were from 41% to 64%, always with a high undecided rate (30% to 48%). All four versions had mentioned that the victim lay *brain dead* in the hospital.

The equivocal results from Story 3 were elucidated by an analysis of the reasons given for the decision. Of the 187 undecided responses across the four versions, 123 (66%) of these mentioned as their reason for being undecided the fact that the wishes of the deceased were unknown. However, 30 (16%) of the responses mentioned some aspect of "brain death" as their reason. Many of these subjects incorrectly interpreted brain dead as not clearly dead. Of the much smaller number of responses not to donate (40), 22 (55%) gave "brain dead" as their reason, saying things like, "They shouldn't donate the organs, because he's only brain dead and may recover." This was by far the major category of reasons given by subjects who chose not to donate. This finding is consistent with a recent finding from a word association study by Shanteau and Linin (1990), which found that many college students understood the term brain dead as a condition less serious than terminal. Clearly, if subjects were making such an interpretation, the rate of recommending donation in Story 3 may well have been reduced by this misunderstanding.

Because of this possible misinterpretation, Scenario 3 was replicated with a different subject sample without the term brain dead; Story 4 was identical to 3 except for the substitution of the word dead for brain dead. Basic results appear at

			TABLE 2				
Percentages	of	Decision	Responses	for	Brain	Dead	Stories

	Response			
Story	Yesa	No	I'm Undecided	n
Story 1: Andrea Barnett				
Brain dead - no explanation	76.0 (8.4)	11.0	13.0	100
Brain dead + explanation	76.3 (8.5)	9.3	14.4	97
Dead - no explanation	70.4 (9.0)	7.1	22.4	98
Dead + explanation	74.0 (8.6)	10.0	16.0	100
Story 2: Kim Staples				
Brain dead + signed donor card	91.7 (6.4)	1.4	6.9	72
Brain dead + explanation + signed donor card	98.6 (2.7)	0.0	1.4	74
Lifeless body + signed donor card	88.4 (7.6)	2.9	8.7	69
Lifeless body + explanation + signed donor card	93.2 (5.8)	2.7	4.1	73
Story 3: David Jenkins (+ brain dead)				
Movie star in posh neighborhood	41.0 (8.7)	10.7	48.4	122
Lawyer in posh neighborhood	52.0 (8.8)	8.8	39.2	125
Teacher in middle-class neighborhood	64.2 (8.6)	5.0	30.0	120
Construction worker in inner-city	54.5 (8.9)	7.4	38.0	121
Story 4: David Jenkins (- brain dead)				
Movie star in posh neighborhood	61.1 (11.3)	12.5	26.4	72
Lawyer in posh neighborhood	54.1 (11.4)	8.1	37.8	74
Teacher in middle-class neighborhood	60.9 (11.5)	10.1	29.0	69
Construction worker in inner-city	64.4 (11.0)	8.2	27.4	73

<sup>&</sup>lt;sup>a</sup>95% confidence intervals are plus or minus the number in parentheses.

the bottom of Table 2. To compare the effect of the elimination of *brain dead*, responses to Scenarios 3 and 4 were analyzed by classifying subjects by their responses to the demographic questionnaire as donors, willings, undecideds, or nondonors. However, because we were not interested in the original status manipulation but only in the presence or absence of the term *brain dead*, subject decisions were pooled over all four versions. These results appear in Table 3.

The most obvious differences between Stories 3 and 4 appeared in the undecided and positive decision categories. As

TABLE 3
Percentages of Decision Responses × Subject Donor
Type for Stories 3 and 4

	Response				
Subject Donor Condition	Yesª	No	I'm Undecided <sup>a</sup>	n	
Yes (donors)					
Story 3	68.7 (14.6)	4.5	26.9 (10.6)	67	
Story 4	84.2 (11.6)	0.0	15.8 (11.6)	38	
Willing					
Story 3	69.0 (8.5)	5.3	25.7 (8.0)	113	
Story 4	81.8 (9.3)	4.5	13.6 (8.3)	66	
Might (undecideds)					
Story 3	50.5 (6.7)	7.4	42.1 (6.6)	216	
Story 4	54.8 (8.4)	10.4	34.8 (8.0)	135	
Decided against (nondonors)					
Story 3	20.3 (9.1)	18.9	60.8 (11.0)	75	
Story 4	25.6 (13.0)	23.3	51.2 (14.9)	43	

Note. Story 3 contains brain dead; Story 4 substituted dead for brain dead.

discussed earlier, when Story 3 was analyzed by reason, many subjects who chose to remain undecided or not to donate the victim's organs indicated some aspect of brain death as influencing their choice. With the substitution of brain dead by the less problematic dead, there was a decrease of 7% to 12% per cell in the number of indecisions across all donor categories. Furthermore, the number of subjects recommending donation increased in all groups, with increases of 4% to 15.5%.

These differences within the donors and willings were significant (p < .05), and even the undecideds and nondonors increased nonsignificantly.

To further explore possible miscommunication about the term brain dead, 320 new subjects from the same subject pool were given the question "If you heard that Jack was proclaimed brain dead by three doctors independently, which of the following is the most accurate interpretation of this diagnosis?" as a filler task in another psychology experiment unrelated to organ donation. They were given five possible answers and were told that the question was asked in connection with another study on medical knowledge.

Results showed that only 30% of the subjects chose the correct alternative, "He has already died and there is no possible hope of surviving." However, 48% chose "His brain has been damaged and he will lie helpless for the rest of his life, perhaps for years," a dire but not necessarily terminal prognosis. In addition, 19% chose "He is in a coma and is not now responding to anyone, though other indicators are normal," whereas 1% chose each of the other three alternatives, "He is in very serious condition with only about a 50% chance of surviving," "He is gravely ill and has only a very slim chance of surviving," and "The doctors are very pessimistic but cannot totally agree on whether he has any chance of surviving." These data support the finding of Shanteau and Linin's

<sup>&</sup>lt;sup>a</sup>95% confidence intervals are plus or minus the number in parentheses.

(1990) word-association study that many people do not fully understand the finality indicated by the term *brain dead*.

#### Other Communication Problems

Let us now turn more briefly to two other issues where the nature of the communication to the potential donor family may make a substantial difference.

Cremation or open casket. Story 5 orthogonally varied the type of funeral planned (cremation or open casket) with either no explanation at all or an explanation that organ donation would not disfigure the body, a clarification suggested by Corlett (1985), Parisi and Katz (1986), and Winkel (1984). Results appear in Table 4.

When presented scenarios without the aid of an explanation of nondisfigurement, subjects recommended donation nonsignificantly more when cremation rather than an open casket funeral was chosen by the next of kin. Significantly (p < .05) increased percentages recommended donation in the versions that provided an explanation of nondisfigurement. Although it was not surprising to find this in the open casket versions, this supportive and clarifying statement also increased the rates of donation in the cremation scenarios.

Further partitioning of the data was used to elucidate these findings. Based on responses to the demographic questionnaire, subjects were divided into donors, willings, undecideds, and nondonors. Donor decisions were tallied separately for each group. These data also appear in Table 4.

TABLE 4
Percentages of Decision Responses to Story 5 ×
Condition and Subject Donor

	Response			
Story 5: Bert Frederick	Yesa	No	I'm Undecided	n
Cremated – no explanation	55.0 (9.8)	29.0	16.0	100
Yes (donors)	90.0 (18.6)	10.0	0.0	10
Willing	61.9 (20.8)	14.3	23.8	21
Might (undecideds)	47.4 (13.0)	33.3	19.3	57
Decided against (nondonors)	54.5 (29.4)	45.5	0.0	11
Cremated + explanation	74.0 (8.8)	12.5	13.5	96
Yes (donors)	91.7 (15.6)	0.0	8.3	12
Willing	78.3 (16.8)	8.7	13.0	23
Might (undecideds)	75.0 (12.8)	9.8	15.9	44
Decided against (nondonors)	56.3 (24.3)	31.3	12.5	16
Open casket - no explanation	46.9 (9.9)	21.4	31.6	98
Yes (donors)	66.7 (18.8)	8.3	25.0	24
Willing	52.4 (21.4)	23.8	23.8	21
Might (undecideds)	40.0 (15.2)	17.5	42.5	40
Decided against (nondonors)	16.7 (21.1)	58.3	25.0	12
Open casket + explanation	74.0 (8.6)	12.0	14.0	100
Yes (donors)	83.3 (17.2)	0.0	16.7	18
Willing	100.0 (-)	0.0	0.0	17
Might (undecideds)	80.4 (11.5)	8.7	10.9	46
Decided against (nondonors)	26.3 (19.8)	42.1	31.6	19

<sup>&</sup>lt;sup>a</sup>95% confidence intervals are plus or minus the number in parentheses.

First of all, the more favorably disposed toward organ donation the subject was, the more likely the subject was to suggest donation for the character in the story. However, information in the story was a far more influential factor than the subject's own attitude. Second, the greatest differences in response to the terms *cremation* and *open casket* alone can be found between the donors and nondonors. Donors and nondonors recommended donation in the cremation/no explanation version, 90.0% and 54.5%, respectively. The same groups chose to donate the organs of the victim 66.7% and 16.7% of the time when presented with an open casket/no explanation version. Third, unlike what was found with the brain dead scenarios, a simple explanation did seem to be helpful in clearing up any misunderstandings or fears about both of the terms cremation and open casket. The rates of donation increased in all groups when an explanation about disfigurement was added, especially strongly so with the term open casket.

The explanation of the open casket produced the largest increases in donation in the willings and undecideds. Even in the case of cremation, an explanation made a significant difference in these two groups. One could perhaps view the explanation, in this case, as a general communication lending support in a time of confusion and uncertainty about what to do. Whatever the reason, this and the previous results suggest that, although influenced by their own beliefs, subjects across the entire opinion spectrum decided largely based on their understanding of the terms cremation and open casket.

Transplantation or research. Although Harris et al. (1990) found subjects more positively disposed to organ donation for purposes of transplantation than for use in medical research, Story 6 was designed to orthogonally vary the wishes of the deceased (victim signed donor card or victim chose not to sign donor card) with the designation of how the organs would be used (transplantation or medical research).

As Table 5 indicates, subjects were nonsignificantly more willing to recommend donation for transplantation than for research, 95.8% and 17.8% versus 88.4% and 9.5%, respectively. The wishes of the deceased, however, carry the most weight in such a decision.

TABLE 5
Percentages of Decision Responses to Story 6

	Response			
Story 6: Warren Marcus	Yesa	No	I'm Undecided	n
Transplantation + signed				
donor card	95.8 (4.6)	0.0	4.2	72
Medical research-chose not				
to sign card	9.5 (6.7)	79.7	10.8	74
Medical research + signed				
donor card	88.4 (7.6)	1.4	10.1	69
Transplantation - chose not to				
sign card	17.8 (8.8)	68.5	13.7	73

<sup>&</sup>lt;sup>a</sup>95% confidence intervals are plus or minus the number in parentheses.

#### DISCUSSION

This research has demonstrated the productive use of an experimental methodology to examine the communication and miscommunication about brain death and other donationrelevant issues involved in the context of making a decision about organ donation. This technique yielded some useful results of a sort not obtainable from survey methodology. Some limitations and cautions must, of course, be acknowledged. First of all, subjects were asked to recommend a decision for someone whom they did not know, which may be different than what they would in fact choose for their own family in a real situation. The extremely heavy stress and emotional trauma of such a situation is, of course, not reproducible in the laboratory. Still, in defense of this methodology, the four versions of each story were identical except for the critical target information. Thus, any differences in decisions should be attributable to that particular factor. Even very small changes in wording communicated a very different message that often had a substantial impact.

Brain death is a fairly new concept, which defines the end of life in such a way that enables transplant teams to remove donated organs in usable condition from a cadaver. However, it is also a term whose meaning is not being accurately communicated by health-care professionals to the lay public. Youngner et al. (1989) reported that health-care personnel do not use consistently coherent descriptions of death, and they demonstrate confusion about death criteria. Linguistically, the word *brain* is used in this case as an adjective modifying *death* or *dead*, thus apparently qualifying it in some way to suggest "less than really dead." Shanteau and Linin (1990), in a word-association study, found support for this belief.

Terms like *life support* can be very misleading. It might be less confusing to say something like *organ support* for machines serving the dual purpose in the case of brain-dead individuals of allowing the family time to decide not to terminate a loved one's life (it has already terminated), but to accept the death, and to keep organs viable for possible transplantation. Compounding the problem is the fact that this same technology that gives the false impression of life in some people who are actually dead, also sustains life in patients who are less severely injured and have actual hope of recovery (Lucas et al., 1987; Youngner et al., 1985). Physicians asking permission from the family to remove mechanical support from a "brain dead" individual may be seen as implying that the patient is not really dead until that support is removed (Mahowald, 1989).

The media can be a powerful public opinion tool—for example, in appealing to the public for organs for a particularly needy recipient (Greenfield, 1988; Gunby, 1983). Of course, the media are not immune to inaccuracies. For exam-

ple, a network news correspondent recently described someone as "partially brain dead for 3 days" before later regaining consciousness. Media, particularly television, are major sources of information about the world. When that information or the assumptions behind it are inaccurate, those inaccuracies become reality for the unwitting public (Harris, 1989; Jamieson & Campbell, 1988; Schulman, 1988). Science, in particular, seems to be prone to certain types of media distortion (Barrie, 1983; Bradley & Brooman, 1980; Goldstein, 1986; Molinari, 1982; Winsten, 1985).

What, then, may be done? First, it is psychologically important to give donor families an exact "moment" of death, one arrived at when the final brain death diagnosis is made. This would not only facilitate the performance of crucial tasks such as funeral arrangements (Stuart, 1984; Youngner & Bartlett, 1983), but would also relieve the psychological confusion of whether death has really occurred, decrease the mistrust toward physicians, and make it easier for the next of kin to understand that artificial machine ventilation and breathing are not the same (Ellis, 1980). If a time of death is not pinpointed, family members may be more reluctant to consent to organ donation. In fact, even if a decision is made recommending donation, the next of kin may have residual guilt feelings about being the one to decide to "pull the plug" on a loved one whom they still perceived as living. They may even perceive organ procurement as the "actual" cause of death. Second, perhaps the term brain dead should be abandoned in favor of the simpler term dead (Annas, 1988). Whatever is done, the criteria and terminology surrounding death and organ donation need to be unambiguous, understandable, and informative to all, including the medical profession, the media, and the public (Bisnaire, Burden, & Monik, 1988; Borozny, 1988; Crandall, 1987; Daly, 1982; Kirste, Muthny, & Wilms, 1988; Montefusco, Levine, Goldsmith, & Veith, 1985; Murphy, 1986; Richards, 1987; Stuart, 1984; Tiefel, 1978).

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<sup>&</sup>lt;sup>1</sup>Both the legal and medical professions are involved in an ongoing reevaluation of the concept of death. For discussions of some of the ethical issues involved in this issue, see Brooks (1985), Gallagher (1988), Isaacs (1978), Jennett and Hessett (1981), Jonsen (1987), Joynt (1984), Kaufman and Lynn (1986), Lamb (1987), Lucas et al. (1987), Moran (1984), Nilges (1984), Shrader (1986), Stanley (1987), Ufford (1980), and Youngner and Bartlett (1983).

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