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Socialization to Dying: Social Determinants of Death Acknowledgment and Treatment Among Terminally Ill Geriatric Patients*

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Although the vast majority of deaths occur among terminally ill geriatric patients, little is known about the etiology of these patients’ death acknowledgment and ultimate type of treatment. Based on interviews with 76 triads composed of physicians, terminally ill patients, and primary caregivers, this study uses the socialization perspective to identify the actors and actions that most strongly affect the patient’s death acknowledgment and receipt of exclusively palliative care (i.e., socialization to the dying role). Whereas patient preferences and sociodemographic characteristics do not influence significantly the patient’s odds of death acknowledgment, these odds are increased if their primary caregivers accept death, their physicians are not affiliated with a teaching hospital, and the terminal prognosis is disclosed to them and disclosed “matter-of-factly.” Patients who acknowledge death, whose agents value pain alleviation over life-prolongation, and whose physicians are not affiliated with a teaching hospital, are substantially more likely to receive exclusively palliative rather than curative terminal treatment.

Concerns about terminal geriatric care extend beyond fears of financial strain and health care system overload. The aging of the population has caused chronic illness and the deteriorations of aging to be the primary causes of death in the United States (Benoliel 1988). Studies have shown that between 25 and 35 percent of Medicare expenditures go to enrollees who will die in that year, and that medical care costs increase as death approaches (Fuchs 1984; Lubitz and Prihoda 1984). Research also reveals that patients dying from chronic illnesses spend most of their remaining days in hospitals and nursing homes (Riley and Riley 1986) and often do not die how or where they might wish (cf. Cox 1988; Kalish and Reynolds 1981). Thus, despite the fact that the legal system has consistently upheld the patient’s right to the self-determination of treatment (Humphry and Wickett 1986) and states have enacted “right to die” legislation (e.g., the California Natural Death Act of 1976), a substantial number of patients do not appear to exert control over the type of treatment they ultimately receive. Taken together these findings suggest that patients and their family members, as well as health care providers and policy makers, could benefit from an investigation of the determinants of appropriate terminal treatment.

Social science research on the dying patient has tended to focus on the patient’s psychological states and adjustment to death (Kastenbaum and Aisenberg 1976; Kubler-Ross

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In this paper the following hypothesis is tested: variations in patients' socialization agents and practices determine the roles assumed by the dying elderly patient. More specifically, I examine the effects that select components of socialization have upon the odds that the patient will assume the dying role (i.e., his/her acknowledgment of death and receipt of exclusively palliative treatments) or the sick role (i.e., his/her non-death acknowledgment and receipt of curative treatments).

BACKGROUND

The need for information concerning terminal geriatric care is evidenced by the emergence of several social, economic, and medical trends. Improved medical technology and public health practices have contributed to dramatic increases in average life expectancy (Coe 1983) and the number of individuals aged 65 and over (Siegel and Tauber 1986). As people age, enduring chronic illnesses tend to replace the briefer acute illness episodes of youth (Davis 1986; Mor 1987; Shanas and Maddox 1985). Given that three-fourths of all deaths occur among persons aged 65 and over (Riley and Riley 1986), the vast majority of deaths in the United States are experienced by aged individuals dying of chronic diseases (Benoliel 1988). The disproportionate amount of funds allocated for the care of the slowly dying elderly (Callahan 1987; Lubitz and Prihoda 1984) along with the growing social and ethical implications of providing such care, highlight the need to examine why life-sustaining technologies are administered to dying patients of advanced ages.

Medical advancements also have lengthened the time from the onset of illness until the moment of death. With the advent of medical technology such as respirators, radiation, and chemotherapy, the medical profession has enhanced its capacity to delay death. One consequence of the application of life-prolonging procedures has been the dramatic increases in the costs of terminal geriatric care. Despite the extreme expense of life-saving therapies, such interventions typically have low rates of long-term success (Fuchs 1974). Given that life-sustaining technologies protract the dying process and incur high costs for patients and the govern-
ment, the value of these procedures might be justified if patients were shown to want everything medically possible done to save their lives.

Research, however, reveals that terminally ill patients would prefer a brief, painless death to having their lives prolonged through life-saving treatments (Fulton and Geis 1965; Glaser and Strauss 1965). It has been shown that old people generally come to perceive death as inevitable and experience fewer death-related anxieties (Bengston, Cuellar, and Ragan 1977). In fact, aged persons rarely show marked fear of death and "those in poor health most often look (sic) forward to death in a positive manner" (Swenson 1961, p. 52). Callahan writes that the greater fear of the elderly is "a death marked by technological oppressiveness, wrapped in a cocoon of tubes and machines" (Callahan 1987, p. 160). Moreover, 85.1 percent of the terminally ill geriatric patients interviewed for this study stated that they would prefer the alleviation of pain and suffering (even if they did not live as long) to the prolongation of life as long as is medically possible (even if they experienced aversive side-effects; see Table 1).

If terminally ill geriatric patients would rather have the quality than the quantity of their lives advanced, why will a significant proportion of these patients receive curative end-stage treatment? What social factors determine the patient’s self-evaluated health status and ultimate treatment modality?

**The Predictive Utility of the Socialization Perspective**

This study proposes a model in which specified components of socialization are used to predict the likelihood of a terminal patient’s death acknowledgment and ultimate form of treatment. If we conceptualize socialization as having four basic components—agents (i.e., representatives of the normative order who are responsible for transmitting the content of socialization), contents (i.e., the norms, attitudes and behavioral skills needed to be mastered by the socialize), processes (i.e., the manner in which the socialization content is conveyed), and outcomes (i.e., the behavioral role internalizations and the performance of appropriate attitudes and norms; George 1983; Goslin 1969)—we can use the first three components to predict particular socialization outcomes. The socialization outcomes of interest here are the terminally ill geriatric patient’s death acknowledgment and final form of care.

The general thesis is that dying elderly patients receive curative treatments largely because they have been socialized to the sick role rather than the dying role. Given our cultural proclivity to deny death and employ heroic means to sustain life (Kastenbaum and Aisenberg 1976), many patients considered “terminal” by the medical profession (i.e., having a life-expectancy of six months or less) are expected to be discouraged from perceiving themselves as dying and encouraged to fight for life. Individuals who refuse to acknowledge that they are dying and who opt for curative treatments in the terminal phases of their illness are defined here as patients who have been socialized to the sick role. By contrast, patients who acknowledge that their death is imminent and who receive exclusively palliative rather than curative care are defined here as persons who have been socialized to the dying role.

Although a fuller model might include additional personality measures and the effects of reciprocal socialization (i.e., the social influence of the patient on the socialization agents), this study will focus primarily upon the way in which the patient’s socialization agents affect his/her manner of death. This unilateral approach is justified by research indicating that older and critically ill individuals are more prone to accept the subordinate, dependent role of the patient and less likely to challenge their physician’s authority than are younger patients (Haug 1979; Waymack and Taler 1988). Terminally ill elderly patients, in particular, have been shown to want to abdicate the responsibility for determining their own medical care (Ende et al. 1989). Thus, while a patient’s role identity (itself a consequence of socialization) is expected to influence the type of treatment the patient will receive, the personal preferences of the patient are considered of little consequence relative to those of his/her significant others. The models in this study will therefore include patient preferences and sociodemographic characteristics only as controls and for the purpose of demonstrating the weakness of these patient-level effects.
HYPOTHESES

Characteristics of the Socialization Agents

In this paper I attempt to identify socialization components that will significantly affect (1) the patient’s likelihood of death acknowledgment and (2) his/her likelihood of receiving exclusively palliative care. The hypothesized relationships among the selected socialization components are depicted in Figure 1.

The patient’s socialization agents (in this case, primary caregivers—family members and friends—and physicians) are expected to affect the patient’s odds of being socialized to identify with the dying role. When the socialization agents state that the primary goal of terminal treatment should be (a) the prolongation of life as long as medically possible (even if the patient suffers from aversive side-effects) to (b) the alleviation of pain and suffering (even if the patient does not live as long as a result), the patient should be less likely to acknowledge that s/he is terminally ill. If the patient’s identity is formed through interactions with physicians and caregivers who hold these views, then the patient should be substantially less inclined to acknowledge that s/he is dying because s/he is cared for by individuals who advocate treatments aimed at keeping him/her alive.

Given the strong influence of the physician’s and caregiver’s beliefs on the medical decision-making process, one would expect their values to have a strong direct effect on the patient’s ultimate form of care. Thus, patients whose socialization agents prefer extending the patient’s quantity of life to advancing his/her quality of life are expected to receive curative treatments because their agents encourage them to opt for treatments that offer the possibility of prolonged life. Patients whose agents both agree that the goal of terminal treatment should be to advance their quality of life are expected to opt for exclusively palliative care.

The patient’s death acknowledgment also is expected to vary according to the physician’s hospital affiliation. Teaching hospitals are research-oriented medical centers equipped with the most advanced life-sustaining technologies. Physicians primarily affiliated with teaching hospitals are researchers who are eager to test new treatments/equipment and develop potential cures. Teaching hospital physicians may not wish the patient to accept that s/he is dying because this might discourage him/her from becoming a participant in their research. Patients encouraged to believe that “nothing more can be done” to rid them of their fatal illness may not wish to reduce the quality of their lives by experimenting with potential cures. Thus, patients whose physicians are affiliated primarily with a teaching hospital are expected to have substantially reduced odds of death acknowledgment.

Given the competitiveness of the academic environment, university hospitals also may select and breed aggressiveness in the physi-

FIGURE 1. Hypothesized Relationships Among Socialization Agents’ Characteristics, Content, Process and Outcomes

Socialization Agents’ Characteristics
- Prefer Palliative Treatment
- Caregiver Accepts Death
- Dr. Affiliated with Teaching Hospital

Socialization Content
- Disclosure of Terminal Prognosis to Patient

Socialization Outcome #1
- Patient’s Death Acknowledgment

Socialization Outcome #2
- Receipt of Exclusively Palliative Treatment

Socialization Process
- Unambiguous Disclosure
- Democratic Decision-Making Style
cians who work there. Physicians who work in this type of hospital environment may therefore be more prone to apply heroic life-extending procedures than would physicians who work in a less research-oriented, aggressive atmosphere. Because teaching hospital physicians are predisposed to fight their patients’ diseases, their patients should be less likely to receive exclusively palliative care than patients whose physicians are not working in a teaching hospital.

When the patient’s primary caregiver is able to accept death him/herself, s/he should be more accepting of the patient’s terminal health status. As “death acceptors,” these agents should acknowledge more readily that the patient has an incurable condition. If, as Cooley’s (1909) “looking-glass” theory would have it, one’s judgments about oneself reflect the judgments of others, especially significant others, one would expect that patients cared for by individuals who are capable of accepting that they are dying should, likewise, conclude that their health status is terminal. Alternately, “death rejectors” should be more resistant to perceiving and treating the patient as if s/he were terminally ill. This should discourage the patient from perceiving his/her condition as terminal.

If the patient’s family members and friends accept death, one would expect these caregivers to want to improve the patient’s quality of life in what they perceive to be his/her final months or days. Patients whose caregivers are capable of accepting death should therefore have a substantially higher probability of receiving exclusively palliative treatment.

The Content of Socialization

Given that physicians are generally able to establish whether or not the patient is terminal, and that treatment plans are based on this assessment, the determination of the patient’s health status is of great practical importance. The communication of the terminal prognosis to the patient is of no less consequence for the patient’s perceptions of his/her health. Few would argue with the assertion that the agents’ disclosure of the terminal prognosis to the patient will profoundly affect his/her death acknowledgment. Nonetheless, caregivers frequently claim that there is no need to inform patients because they typically already know that they are terminal. By demonstrating disclosure’s impact upon the patient’s death acknowledgment—regardless of the patient’s presumed level of awareness of the terminal prognosis—the impact of the verbal disclosure upon the patient’s self-evaluated health can be demonstrated. If patients who are thought to know that they are dying are less likely to be told, then disclosure should not distinguish death acknowledgers from non-death acknowledgers. To the extent that it does, the act of telling the patient would appear to be a critical determinant of the patient’s perception of him/herself as dying.

Certain types of socialization agents are hypothesized to be less inclined to tell the patient that s/he is dying. Because the socialization agents who advocate curative treatment for the terminally ill are unable to accept death themselves, and physicians at teaching hospitals are expected to be less willing to treat the patient as if s/he was dying, they are hypothesized to be less likely to disclose the terminal prognosis to the patient.

Patients who acknowledge being terminally ill should be less likely to opt for the “curative” treatment of their incurable disease. Thus, the effect of disclosure should influence the terminal treatment received only indirectly through the patient’s death acknowledgment. Consequently, informing the patient that s/he is dying should not influence directly the type of treatment s/he receives.

The Process of Socialization

The manner in which the disclosure of the terminal prognosis is made to the patient also should influence the patient’s willingness to report that his/her death is imminent. Because physicians are typically held responsible for disclosing the terminal prognosis to the patient—a stylized fact substantiated in Table 1 by only 20 percent of the primary caregivers who disclose compared with 58 percent for the physicians—the effects of the physician’s manner of disclosure will be examined.

One might expect patients to be more likely to acknowledge that their health status is terminal if their physicians disclose unambiguously. Direct, unequivocal disclosures will make it difficult for the patient to interpret the disclosure as meaning anything other than
that his/her death is imminent. Disclosures phrased in indirect and ambiguous terms, on the other hand, will allow the patient to interpret the doctor’s message in a way that can be perceived as less threatening to his/her existence. Therefore, I hypothesize that patients whose physicians disclose their terminal prognosis in a matter-of-fact, unequivocal manner should be more likely to acknowledge that they are dying than patients whose agents disclose this information vaguely and ambiguously.

Certain processes of socialization also are expected to influence the type of treatment received by the terminally ill patient. If the socialization agents enable the patient to participate in the making of his/her treatment plans (i.e., they have a democratic decision-making style), the patient should have a high probability of receiving the type of treatment s/he most desires. If the agents hear the patient’s preferences, and particularly if they are responsive to these preferences, the patient will exert more control over the treatment decision than if his/her agents paternalistically select the treatment they believe is best for the patient. Because, as mentioned earlier, approximately 85 percent of terminally ill geriatric patients favor palliative to curative treatments, the vast majority of patients who get their preferred mode of treatment will receive palliative therapy.

METHODS

Sampling and Survey Procedures

Data for this study were obtained from three distinct populations—physicians, primary caregivers, and patients—each of which was drawn from Northern or Southern California. The physician sample (N = 76) was randomly selected from lists of teaching and non-teaching hospital physicians, both of which were provided by hospital discharge planners. Because of their considerable contact with fatal illness, only oncologists, general internists, and general practitioners were asked to participate in the study.

Because one objective was to compare physicians at teaching hospitals with those at non-teaching hospitals, I sought the participation of doctors who worked in major medical research/teaching centers. Stanford, University of California San Francisco (UCSF), and Los Angeles (UCLA) Medical Center physicians were approached for participation in the study because of their ready access to advanced medical technologies as well as the availability of hospice programs for their patients. The non-teaching hospital physician sample was a random selection of physicians affiliated with the Palo Alto and Menlo Park Veterans Affairs Medical Centers and six community hospitals in the San Francisco Bay Area. These hospitals also had ready access to hospice services. Although many of the non-teaching hospitals were involved in research, they did not focus on making therapeutic advances to the extent that “tertiary care facilities” do.

Overall, the response rate for physicians was 68 percent, with no notable distinctions between teaching hospital and non-teaching hospital physician participation. Physicians involved in the study were responsible for providing a list of their mentally competent geriatric (i.e., over age 65) patients whom they had determined to be terminally ill (i.e., having a life-expectancy of less than six months), along with the person they regarded as the patient’s primary informal caregiver (typically the spouse or adult offspring). Many physicians provided the names of patients who were either enrolled or about to be enrolled in affiliated hospice programs. Patients and their caregivers were randomly selected from these lists. An advantage of this sampling strategy was that physician and caregiver responses referred to actions toward a particular patient, which tended to increase the accuracy of their reports.

Eighty-seven percent of the primary caregivers agreed to be interviewed (N = 76). Among those who declined, emotional and physical exhaustion was the modal response given for refusal. Patients had the highest response rate (89%)—only 5 percent of the patients approached directly refused to be interviewed, and 6 percent were unable to be matched with a caregiver due to the latter’s refusal—resulting in a sample size of 76. The most frequent reason for refusal was that they did not feel “up to it,” even though the patient questionnaire required simple responses and lasted an average of fifteen minutes. To the extent that more debilitated patients were excluded, the patients sample may contain a somewhat higher percentage of
patients still receptive to receiving curative treatments.

Although controlling more finely for the stage of the disease in which the patient was interviewed would have been optimal, this proved logistically infeasible. Due to high rates of sample attrition, patients and their caregivers were interviewed as shortly after the physician referred the patient to me as was possible. Thus, while all patients did have a life-expectancy of six months or less, some of them may have been interviewed at different phases of their terminal illness.

Given that all the hospitals were in California (which has pioneered in the protection of the patient's rights to withhold or withdraw life-sustaining technologies), the results can only be generalized to patients who obtain their medical care within this state. Nonetheless, because the study was conducted exclusively in California, the legal and social welfare policies were uniform across all respondents. In light of the fact that California law has provided medical care consumers with "new and effective mechanisms for enforcing their 'right to decide' " (Gilfix and Raffin 1984), the sample may receive substantially fewer treatments counter to their expressed preferences than terminally ill patients in other locales. Consequently, if this study were conducted elsewhere, the results are expected to be as strong, if not stronger, than those reported here.

Measures

Patient's death acknowledgment. Patients were asked, "How would you define the current condition of your health?" Those who responded that their health status was "seriously ill and terminal" were classified as "death acknowledgers" and coded 1. Those who responded that they were "relatively healthy" or "seriously ill, but not terminal" were considered non-death acknowledgers and were coded 0.

Type of terminal treatment. Physicians and/or nurses were asked the primary intent of the treatment received by the patient two months after the physician interview. If the primary intent of treatment was to alleviate the patient's pain rather than prolong the patient's life, palliative (coded 1). If the physician administered treatments for the purpose of prolonging the patient's life, such care was labeled curative (coded 0).

Treatment preferences. Those respondents who stated that the primary goal of treatment for the terminally ill patient should be the alleviation of pain and suffering, even if the patient may not live as long as a result, were coded 1. Those who considered the prolongation of life as long as medically possible, even if the patient suffers aversive side-effects, were coded 0. A measure of concordance between the formal and informal caregivers' preferences was created by a dummy variable in which a value of 1 was assigned when both the doctor and the caregiver advocated the receipt of palliative treatment only; 0 otherwise.

Primary caregiver's death acceptance. The caregiver's own personal death acceptance was measured by the 16-item Klug Death Acceptance Scale which used the 5-point Likert format. Klug and Sinha (1988) have determined the instrument to be valid and have obtained Kuder-Richardson-20 coefficients of .78 and .85 for 245 church-going adults. Among the caregivers in our sample the scale had test-retest reliability coefficients of .80 and .83. Respondents with scores ranging from 58–80 were coded 1 and classified as death acceptors. Borderline death acceptors (i.e., for scores between 38 and 58) and death rejectors (i.e., for scores between 16 and 39) were coded 0.

Physician's hospital affiliation. The hospital with which the socialization agent primarily affiliated him/herself was either a teaching hospital (i.e., tertiary care facility based in a medical school) or a local community hospital (including veterans affairs medical centers).

Disclosure. If the patient had been told of his/her prognosis directly by an agent, the disclosure variable was coded 1; 0 otherwise.

Manner of disclosure. Of the physicians who did disclose to the patient (N = 44), those who stated that their manner of disclosure was closest to "I feel patients have to face the truth so I tell them they are terminal in a direct, unequivocal way" were coded 1; those whose disclosure was more along the lines of "I try to convey to these patients that they are seriously ill, but avoid saying that they are terminal in an unequivocal way" were coded 0.

Decision-making style. Agents who either let the patient participate in the medical decision-making process or who let the
patient select the therapy that s/he was to receive, were considered to have a democratic style (coded 1). Agents who were considered to be paternalistic/authoritarian were those who stated that they typically make the medical decisions for the patient (coded 0).

Control variables. Respondents’ ages were coded in years. The scores for the patient’s education (i.e., 0–11 years = 1; high school = 2; college = 3; post-graduate = 4), income (i.e., under $5–10,000 = 1; $11–39,000 = 2; $40–50,000 = 3) and occupation (i.e., 1 = professional and managerial; 2 = clerical and sales; 3 = operatives and laborers; 4 = farm laborers and others) were totaled and averaged to create a socioeconomic status variable.

Analyses

The analyses first involved an examination of the descriptive statistics for the patient, physician, and primary caregiver samples and the correlations among the analyzed variables. The socialization agents’ traits, content, and process then were analyzed to determine whether these factors influenced the patient’s likelihood of death acknowledgment in the hypothesized ways. A sub-analysis dissected the direct and indirect linkages through which the agents’ characteristics were expected to affect the patient’s death acknowledgment. Last, the effects of the agents’ characteristics and their decision-making style were regressed on the type of treatment ultimately received.

Given that the dependent variables were dichotomous contrasts (i.e., disclosure of the terminal prognosis to the patient vs. non-disclosure; death acknowledgment vs. non-death acknowledgment; curative vs. exclusively palliative care), the logistic regression procedure was used to determine the effects of the socialization agents’ characteristics, content, and processes on the likelihood of disclosure, death acknowledgment, or receipt of curative treatment. Maximum likelihood estimation of this model yielded estimates of the probabilities that an individual with a certain set of characteristics was observed in one of the two disclosure, death acknowledgment, or treatment categories. For the dichotomous independent variables, the regression parameter was the log odds ratio of disclosure, death acknowledgment, or the receipt of exclusively palliative treatment. For the continuous independent variables, the regression parameter gave the change in the log odds of the dependent variable per unit change in the independent variable.

For the sub-analysis I dissected the causal linkages among the agents’ traits and the patient’s death acknowledgment. In Figure 2, the variables were laid out such that all variables to the left were the causes of the “effect” variables to their right. Each variable was then regressed against all the “previous” variables to its left. The parameter estimates

FIGURE 2. Direct and Indirect Effects of Socialization Agents’ Characteristics on Patient Death Acknowledgment

| Caregiver Accepts Death, X1 | 0.68 |
| Dr. at Teaching Hospital, X2 | 0.48 |
| Dr. and Caregiver Prefer Palliation, X3 | 0.14 |
| Either Dr. or Caregiver Makes Disclosure to Patient, X4* | 0.84 |
| Patient’s Death Acknowledgment, X5 | 0.75 |

Note: 
Standardized regression coefficients are displayed.

*For simplicity, only the effects of the combined disclosure variable (i.e., either the doctor’s or the caregiver’s disclosure) are presented (see note 5).
used were the standardized regression coefficients obtained from the SAS logistic regression procedure. By decomposing the total effect (the standardized regression coefficient) into a direct effect (agents’ traits on death acknowledgment) plus the indirect effects (agents’ traits’ effects on disclosure multiplied by the effect of disclosure on death acknowledgment; see Wonnacott and Wonnacott 1984, pp. 379–83), one could determine whether agents’ traits directly influenced the patient’s death acknowledgment or influenced it more indirectly via their effects on disclosure. The following structural equations were estimated:

\[
X_5 = P_{54}X_4 + P_{53}X_3 + P_{52}X_2 + P_{51}X_1 + P_{5U}R
\]

(1)

\[
X_4 = P_{43}X_3 + P_{42}X_2 + P_{41}X_1 + P_{4W}R_W
\]

(2)

where \(X_4\) = the patient’s death acknowledgment, \(X_4\) = the disclosure of the terminal prognosis, \(X_3\) = the caregiver’s treatment preferences, \(X_2\) = the doctor’s hospital affiliation, and \(X_1\) = the caregiver’s death acceptance. The Ps represented the paths and their subscripts reflected the path linking the exogenous (predictor) variables with the endogenous (outcome) variables (e.g., \(P_{54}\) was the path between the patient’s death acknowledgment and disclosure of the terminal prognosis). The Rs indicated the residual or unexplained part of the variance, given the inclusion of the other exogenous effects.

RESULTS

Descriptive Statistics and Correlations Among Analyzed Variables

As shown in Table 1, 42 (i.e., 1.00–0.58 = 0.42) percent of the terminally ill patients interviewed did not define their health status as terminal. Among the patient’s physicians and caregivers, only 69 and 70 percent, respectively, were found to accept death as a part of life. In terms of the socialization agents’ actual behaviors toward the dying patient that were expected to influence the patient’s self-defined health status, only 58 percent of the physicians and 20 percent of the caregivers disclosed the terminal prognosis to the patient. Of the physicians who did disclose, the majority reported to have done so unambiguously.

Table 1 also reveals that 75 percent of the patients received exclusively palliative treatment, while 85 percent indicated that this would be their treatment of choice. Highlighting the discrepancy between the patients’ preferences and the treatment they received, 45 percent of the patients in this study did not receive their treatment of choice. It is interesting to note that 81 percent of the physicians preferred palliative to curative treatment for the patient, but only 64 percent of the caregivers recommended this treatment for the patient. The physician’s advocacy of palliative treatment, however, may be inflated because physicians were well aware (and many informed me) that the medical profession does not consider curative treatment to be appropriate for terminally ill patients.

The zero-order correlations in Table 2 show us that the patient’s death acknowledgment was most strongly associated with the disclosure of the terminal prognosis (\(r = 0.74; p < 0.0001\)). The caregiver’s own acceptance of death also was highly correlated with the patient’s death acknowledgment (\(r = 0.53; p < 0.001\)), as was the physician’s teaching hospital affiliation (\(r = -0.30; p < 0.001\)). As predicted, patients who were cared for by doctors at teaching hospitals were less likely to be told that they were dying (\(r = -0.28; p < 0.01\)). Doctors who disclosed the terminal prognosis to the patient in no uncertain terms, rather than in a less blunt manner, were more likely to care for patients who acknowledged that they were dying (\(r = 0.42; p < 0.01\)).

The patient’s death acknowledgment was significantly related to the receipt of palliative treatment (\(r = 0.28; p < 0.05\)). Given that all the hospice patients (9% of the patient sample) were required to (a) acknowledge that their life expectancy was six months or less and (b) consent to receive only palliative care, the associations between death acknowledgment and receipt of palliative treatment and treatment of choice were inflated. The lack of significant associations between death acknowledgment and the patient’s sociodemographic characteristics, however, were not subject to sample biases. Not only did the absence of patient-level effects support the proposed model of socialization, but they conflicted with past research. Previous studies have shown that women (Ray and Najman 1974; Temple and Ruff 1971), men of higher
<table>
<thead>
<tr>
<th>TABLE 1. Descriptive Statistics of Patient, Physician, and Primary Caregiver Samples</th>
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<tbody>
<tr>
<td>Patients (N = 76)</td>
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<tr>
<td>Terminal Treatment Received</td>
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<tr>
<td>(1 = palliative; 0 = curative)*</td>
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<tr>
<td>Death Acknowledgment (1 = yes; 0 = no)</td>
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<tr>
<td>Treatment of Choice (1 = yes; 0 = no)</td>
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<tr>
<td>Receipt of Preferred Treatment (1 = yes; 0 = no)</td>
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<tr>
<td>Marital Status (1 = married; 0 = unmarried)</td>
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<td>Age (years)</td>
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<td>Sex (1 = female; 0 = male)</td>
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<td>Race (1 = White; 0 = other)</td>
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<tr>
<td>Education (0-11 = 1; high school = 2; college = 3; post-graduate = 4)</td>
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<tr>
<td>Income ($5-10K = 1; $11-39K = 2; $40-50 + K = 3)</td>
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<tr>
<td>Occupation (professional &amp; managerial = 1; clerical &amp; sales = 2; operatives &amp; laborers = 3; farm laborers = 4)</td>
</tr>
<tr>
<td>SES (education + income + occupation)</td>
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<tr>
<td>Relationship to Patient</td>
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<td>(1 = spouse; 0 = other)</td>
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* Dependent variables.
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<th>v1</th>
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<th>v13</th>
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<th>v15</th>
<th>v16</th>
<th>v17</th>
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<tbody>
<tr>
<td>v1</td>
<td>(0.28^*)</td>
<td>(0.11)</td>
<td>(0.02)</td>
<td>(-0.10)</td>
<td>(0.35^*)</td>
<td>(-0.11)</td>
<td>(0.22)</td>
<td>(0.15)</td>
<td>(0.19)</td>
<td>(-0.07)</td>
<td>(-0.12)</td>
<td>(0.34^*)</td>
<td>(0.36^*)</td>
<td>(0.91^***)</td>
<td>(-0.32^*)</td>
<td>(0.36^*)</td>
<td>(-0.18)</td>
</tr>
<tr>
<td>v2</td>
<td>(-0.08)</td>
<td>(0.03)</td>
<td>(0.91^***)</td>
<td>(-0.46)</td>
<td>(-0.29)</td>
<td>(0.21)</td>
<td>(0.15)</td>
<td>(0.10)</td>
<td>(0.16)</td>
<td>(0.36^*)</td>
<td>(0.21)</td>
<td>(0.37^*)</td>
<td>(0.22)</td>
<td>(0.13)</td>
<td>(0.28)</td>
<td>(-0.23)</td>
<td>(0.72^***)</td>
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<tr>
<td>v3</td>
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<td>(0.15)</td>
<td>(-0.03)</td>
<td>(0.31)</td>
<td>(0.10)</td>
<td>(-0.16)</td>
<td>(0.40^**)</td>
<td>(0.24)</td>
<td>(0.19)</td>
<td>(0.00)</td>
<td>(-0.32^*)</td>
<td>(0.08)</td>
<td>(0.18)</td>
<td>(-0.06)</td>
<td>(-0.06)</td>
<td>(-0.14)</td>
<td>(0.53^***)</td>
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<tr>
<td>v4</td>
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<td>(0.25)</td>
<td>(0.34^*)</td>
<td>(0.36^*)</td>
<td>(-0.11)</td>
<td>(-0.08)</td>
<td>(0.40^*)</td>
<td>(0.12)</td>
<td>(0.07)</td>
<td>(0.12)</td>
<td>(-0.12)</td>
<td>(0.25)</td>
<td>(0.15)</td>
<td>(-0.02)</td>
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<td>(0.05)</td>
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<td>v5</td>
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<td>(0.14)</td>
<td>(0.07)</td>
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<td>(-0.07)</td>
<td>(0.07)</td>
<td>(0.20)</td>
<td>(0.13)</td>
<td>(0.13)</td>
<td>(0.07)</td>
<td>(0.07)</td>
<td>(0.14)</td>
<td>(0.12)</td>
<td>(0.12)</td>
<td>(0.08)</td>
<td>(0.13)</td>
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Note: \(p<.10; \ast p<.05; \ast\ast p<.01; \ast\ast\ast p<.001\). Variables: v1 = Patient’s death acknowledgment (yes); v2 = Patient’s receipt of palliative treatment (yes); v3 = Patient prefers palliative treatment (yes); v4 = Patient receives treatment of choice (yes); v5 = Patient’s SES (higher status); v6 = Patient’s marital status (married); v7 = Patient’s age (years); v8 = Patient’s sex (female); v9 = Dr and caregiver’s concordance on treatment (prefer palliative); v10 = Caregiver prefers palliative treatment (yes); v11 = Dr prefers palliative treatment (yes); v12 = Caregiver accepts death (yes); v13 = Dr’s teaching hospital affiliation (yes); v14 = Disclosure of terminal prognosis to patient (yes); v15 = Dr’s manner of disclosure (unambiguous); v16 = Dr and caregiver have democratic style (yes); v17 = Caregiver has democratic style (yes); v18 = Dr has democratic style (yes).
SES (Farley 1971), and older adults (Nelson 1979) have higher levels of death anxiety (a concept Ray and Najman show [1974] to be closely, but negatively, related to death acceptance).

The zero-order correlations also reveal that the caregiver's own death acceptance and preference for palliative treatment were significantly associated with the patient's receipt of only palliative therapy ($r = 0.24; p < .05$ and $r = 0.20; p < .05$, respectively). Physicians primarily affiliated with teaching hospitals also were more likely to care for patients who received curative treatment in the terminal phases of their illness ($r = -0.53; p < .001$). Despite the strong preference of women ($r = 0.91; p < .001$) and older patients ($r = 0.34; p < .05$) for palliative therapy only, they were not more likely to receive this form of care ($r = 0.03$ and $r = 0.12$, respectively). In fact, aside from the patient's death acknowledgment, no other patient characteristic was significantly associated with the type of treatment s/he received, not even his/her preference for palliative care. The next step was to examine whether the effects of the hypothesized social factors could predict the patient's death acknowledgment and receipt of exclusively palliative treatment, after entering the control variables.

**Logistic Regression Analysis for the Patient's Death Acknowledgment**

**Agents' characteristics.** Table 3 contains a model that enters the socialization agents' characteristics, controlling for the effects of the patient's socioeconomic status, marital status, gender, and age (henceforth referred to as the "controls") (see Model 1). While all of the patient-level characteristics in this model remained nonsignificant, two of the three agent's characteristics significantly influenced the patient's probability of acknowledging death. We see that patients whose primary caregivers accepted death were substantially more likely to acknowledge that they were dying ($p = .005$). The odds that a patient would report that his/her condition was

| TABLE 3. Logistic Regressions of Socialization Agents' Characteristics, Disclosure, and Manner of Disclosure on Patient’s Death Acknowledgment (N = 76) |
|-------------------------------------------------|-------------------------------------------------|-------------------------------------------------|
| Independent Variables                          | Model 1                                         | Model 2                                         | Model 3                                         |
|                                                 | b (StErr) Beta                                  | b (StErr) Beta                                  | b (StErr) Beta                                  |
| Dr and Caregiver Prefer                         | 1.38 (1.15) 0.37                               | —                                               | —                                               |
| Palliative Treatment                            | 4.18*** (1.49) 1.13                             | —                                               | —                                               |
| Caregiver Accepts Death                         | 2.82* (1.30) 0.79                              | —                                               | —                                               |
| Dr at Teaching Hosp                             | —                                               | 5.20*** (1.62) 1.44                             | —                                               |
| Disclosure of Terminal Prognosis to Patient     | —                                               | —                                               | 2.69** (1.02) 10.7                              |
| Manner of Disclosure                            | —                                               | —                                               | —                                               |

**Controls: Patient Characteristics**

| SES                                              | 0.03 (0.10) 0.09                               | -0.07 (0.10) -0.27                              | -0.07 (0.10) -0.27                              |
| Marital Status (Married)                        | -0.09 (1.15) -0.02                             | 0.95 (1.30) 0.25                                | 0.65 (0.92) -0.17                               |
| Sex (Female)                                    | 1.60 (1.27) 0.42                              | 1.60 (1.27) 0.42                                | 1.46 (0.98) 0.39                                |
| Age                                             | 0.01 (0.05) 0.04                              | 0.03 (0.05) 0.15                                | 0.01 (0.10) 0.05                                |
| Intercept                                       | 6.29 (5.50) 4.04                              | 4.04 (4.59) 0.47                                | 0.47 (4.35) 0.05                                |

Model chi-square: 22.73 (7 d.f.) 25.81 (5 d.f.) 12.30 (5 d.f.)

*Note: b = unstandardized coefficient; Beta = standardized coefficient.

* $p < .05$; ** $p < .01$; *** $p < .005$. 
terminal were increased by a factor of 65 \((e^{.18})\) if his/her primary caregiver accepted death. Although the combined effects of the agents’ treatment preferences did not appear to have an important influence upon the patient’s death acknowledgment (and the isolated physician and informal caregiver effects, as shown in Table 2, also were not significant), the effect of the physician’s primary hospital affiliation was substantial \((p<.05)\). Patients whose physicians were at teaching, as opposed to community or veterans affairs, hospitals, were approximately 17 times \((e^{2.82})\) less likely to acknowledge that they were dying.

**Disclosure.** When disclosure was estimated along with the controls (see Model 2 of Table 3), we find that the odds of the patient’s death acknowledgment were increased enormously if the patient was told that s/she was dying \((e^{5.20}; p<.001)\). While disclosure here referred to either that of the physician or the caregiver, in analyses involving just the caregiver’s disclosure, patients were found to acknowledge that they were dying in every instance in which the informal caregiver made the disclosure.

**Sub-analysis of Agents’ Characteristics, Effects on Disclosure and Death Acknowledgment.** When the causal linkages among the socialization agent, content, and outcome variables were dissected, certain agent characteristics were found to affect the patient’s death acknowledgment indirectly rather than directly. The results displayed in Figure 2 and Table 4 reveal that physicians not affiliated with a teaching hospital and caregivers who accepted death were more likely to disclose the terminal prognosis to the patient, but disclosure had the strongest direct effect upon the patient’s death acknowledgment. In terms of total effects (i.e., combined direct and indirect effects), however, the primary caregiver’s death acceptance had the greatest impact on the odds that the patient would claim that his/her condition was terminal.

**Manner of Disclosure.** When the physician’s manner of disclosure is estimated along with the controls (see Model 3 of Table 3), we find that direct, unequivocal disclosures increased the likelihood of the patient’s death acknowledgment by a factor of 14.7 \((e^{2.69}; p<.01)\).

**Logistic Regression Analysis for the Treatment Received**

**Agents’ Characteristics.** Model 1 of Table 5 further illustrates that the patient’s treatment preferences have no significant effect on the patient’s receipt of palliative treatment. By contrast, the physician’s hospital affiliation proves to be a powerful predictor \((e^{-2.34}; p<.001)\), with patients whose doctors work in a teaching hospital having considerably greater odds of receiving curative terminal treatment than patients whose doctors work outside of the medical school setting. Patients whose physicians and caregivers advocate the alleviation of pain and suffering over the prolongation of life are approximately three times more likely to receive exclusively palliative treatment \((e^{1.14}; p<.10)\). While the

### TABLE 4. Effects of Agents’ Characteristics and Disclosure on Patient’s Death Acknowledgment (N=76)

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<tr>
<td></td>
<td>b (S.Er) Beta</td>
<td>b (S.Er) Beta</td>
<td>Beta</td>
</tr>
<tr>
<td>Disclosure</td>
<td>3.65*** (1.26)</td>
<td>—</td>
<td>1.00</td>
</tr>
<tr>
<td>Dr and Caregiver Prefer Palliation</td>
<td>0.46 (1.06)</td>
<td>1.79 (0.86)</td>
<td>0.14</td>
</tr>
<tr>
<td>Caregiver Accepts Death</td>
<td>1.82 (1.29)</td>
<td>9.52** (0.96)</td>
<td>0.68</td>
</tr>
<tr>
<td>Dr at Teaching Hospital</td>
<td>-0.85 (1.10)</td>
<td>-6.35* (0.91)</td>
<td>-0.48</td>
</tr>
</tbody>
</table>

*Note: b = unstandardized coefficient; Beta = standardized coefficient. Standardized coefficients are used to calculate the total effects.*

* p < .05; ** p < .01; *** p < .005.
primary caregiver’s ability to accept death increases the odds that the patient will acknowledge death, it does not increase the patient’s likelihood of receiving palliative care.

Decision-making Style. In Model 2 of Table 5 we see that patients whose agents claimed that they let them participate in the making of the treatment decision were no more likely to receive their preferred therapeutic regimen (whatever it was) than patients whose agents assumed full responsibility for deciding the patient’s treatment. The weak effects of the agent’s decision-making style, however, may be a function of an overreporting of democratic styles due to the social desirability of this response.

DISCUSSION

Given that most Americans die of slowly progressing diseases in old age, the determinants of terminal geriatric care should be analyzed. The results of this study suggest that the vast outlays of resources for life-extending technologies are not driven by the patient’s demand for these procedures. In fact, patients are found to exert strikingly little influence in the making of the treatment decision. The aim of this study was to demonstrate the strength of social factors in understanding how and why patients opt for curative end-stage care.

Whereas the focus of previous research has been the patient’s psychological adjustments to death, this paper furthers our understanding of the social dynamics of the treatment decision. Not only do the findings of this study reveal the geriatric patient’s preferences for palliative terminal care, but they highlight how little these preferences affect the treatment given to the patient. Rather, the characteristics and behaviors of the geriatric patient’s physicians and caregivers prove the more powerful predictors of the patient’s death acknowledgment and ultimate treatment.

This study concentrated upon critical socialization components expected to affect the patient’s health perceptions and medical therapy significantly. By isolating potentially significant predictors of the patient’s socialization to the dying role (i.e., death acknowl-
gment and exclusively palliative treatment), the results suggest the usefulness of the socialization framework for the examination of how treatment decisions are made. Evidently, once one can determine the patient’s role identity and critical components of his/her socialization, one may have the essential information for an accurate prediction of selected socialization outcomes.

More specifically, the results reveal that if the patient is cared for by a caregiver who is unable to accept death, the odds of the patient acknowledging that s/he is terminal are reduced substantially. However, family members and friends who are able to accept death may be more able to appreciate the severity of the patient’s condition, enabling them to translate this awareness to the patient. The communication of this vital information enhances the probability of the patient’s death acknowledgment. The fact that death-accepting caregivers are considerably more likely to disclose the terminal prognosis to the patient testifies to the validity of this claim.

Patients whose physicians are primarily affiliated with a teaching hospital also are found to be less likely to acknowledge that they are dying. The reduced likelihood of death acknowledgment among patients whose physicians work in a university hospital may be a function of the doctor’s predisposition to fight the patient’s disease with life-sustaining technologies. University-affiliated physicians may be driven by research, teaching, and financial motivations to have the patient perceive him/herself as curable, and this unwillingness to treat the patient as if s/he were dying decreases the patient’s likelihood of thinking of him/herself as terminal.

One of the major conclusions of this study is that disclosure of the terminal prognosis to the patient has a profound impact on the patient’s death acknowledgment. Although it may be true that it is easier to tell someone s/he is dying if s/he is believed to be able to handle the news, no agent reported that the reason for not telling the patient was due to the patient’s emotional fragility. Rather, the most common reason given for not disclosing was that the agent thought the patient was already aware that s/he was dying. Because disclosure significantly distinguished the patients who acknowledged that they were dying from those who did not, the results indicate that actually telling the patient that s/he is terminal transforms what may be partial awareness into a more accurate perception of the severity of his/her condition. Alternately, if patients’ significant others do not inform them of their terminal prognosis, they may believe that it would be wrong for them to break the existing “conspiracy of silence” by revealing their awareness of their terminal condition.

The results of this study also indicate that direct, unambiguous disclosures facilitate the patient’s death acknowledgment. Given that people often interpret what they are told in a way that is more satisfactory to them, it is understandable that the likelihood the patient will acknowledge that s/he is dying is reduced if s/he is told that s/he is terminal in an indirect, equivocal manner. On the other hand, patients who are told in direct, unambiguous terms are ultimately less prone to misinterpret the message being conveyed to them.

In terms of the effects of socialization on the type of terminal treatment received by the patient, patients who identify with the dying role are found to have greater odds of receiving exclusively palliative care. Patients who come to acknowledge their terminal health status may be less likely to continue receiving curative treatments because such therapy would be inappropriate for a patient who truly considers him/herself to be dying. However, because hospice patients inflated the association between death acknowledgment and treatment, this finding needs to be replicated elsewhere before conclusions can be generalized to all terminally ill geriatric patients.

The effects of the agents’ characteristics vary according to the outcome examined. For example, while the caregiver’s capacity to accept death plays an important role in the patient’s death acknowledgment, this disposition is neither related to a preference for palliative treatment nor to the treatment received by the patient. The agents’ treatment preferences, understandably, have a greater impact on the patient’s treatment than on his/her death acknowledgment.

The one variable that affects both the patient’s death acknowledgment and treatment is the physician’s hospital affiliation. Not only are physicians who work at teaching hospitals less likely to care for patients who admit to being terminal, but their patients also are more likely to receive curative treatment in their last months of life. Doctors who work
in a competitive medical research facility may tend to be more aggressive in their attempts to "cure" patients considered terminally ill because they have the research agendas, equipment, and personalities to do so. Apparently, despite recent affirmations of the patient's right to choose his/her treatment (e.g., the Patient Self-Determination Act [1992] requires health care providers to inform Medicare patients of their right to accept or refuse treatment, as well as their right to formulate advance directives), patient preferences are not effectively countering the predispositions of teaching hospital physicians to treat their dying patients as if they were curable. Perhaps patients are not informing these physicians of what they want or these physicians are less responsive to their patients' wishes. However, given that teaching hospital physicians are less likely to make disclosures to their dying patients, these physicians do not appear to be encouraging their dying patients to realize that they are dying in the first place. If the patient is not informed that his/her condition is incurable, why should s/he not seek treatment aimed at eradicating the disease? Other factors also may contribute to our understanding of these findings. Unstudied personality measures, such as locus of control or assertiveness, may help to account for some of the unexplained variance. Nevertheless, the inclusion of personality variables would not alter the overall pattern of results (e.g., the percentage of patients who receive curative treatment). However, to the extent that membership in support groups, Hemlock-type "right to die" societies, or awareness of recent euthanasia cases are found to encourage patients to assume some control and/or assert their preferences for treatment, it may be possible to increase patient participation in the making of the treatment decision. An intervention aimed at increasing patient participation may prove effective at improving the patient's odds of receiving an appropriate type of terminal treatment.

NOTES

1. Not only do physicians routinely determine the expected life-span of their critically ill patients in order to evaluate the appropriate course of treatment, but certain Medicare entitlements (e.g., the hospice benefit) require the physician to make such a determination. Thus, medical practice and Medicare requirements attest to the medical community's confidence in its ability to reliably classify patients as being terminally ill.

2. Tertiary care is defined as the "services provided by highly specialized providers . . . [which] frequently require highly sophisticated technological and support facilities. The development of these services has been largely a function of diagnostic and therapeutic advances attained through basic and clinical biomedical research" (The Aspen Dictionary of Health Care Administration [1989], pp. 264–65).

3. The term competent is used in this study to refer to patients presumed to possess the normal capacity to understand their situation and the effects of treatment as well as the ability to evaluate treatment decisions. “Competent adults generally have the right to refuse medical treatment, even if the effect is to hasten death” (Merritt 1987, p. 698). Because physicians indicate that most of their terminally ill patients are mentally competent, and those who are not typically have their treatment decisions made for them anyway, the exclusion of incompetent patients seems legitimate.

4. I use the term "primary intent" to acknowledge the fact that seemingly curative treatments may be administered for the sole purpose of minimizing the patient's pain (e.g., surgery or radiation therapy to reduce the size of a painful tumor).

5. For the sake of parsimony, only the results for the combined disclosure variable (i.e., doctor or caregiver) are reported. The singular difference between estimating the effects of the combined disclosure variable and the estimates obtained for each agent's likelihood of disclosure is that the magnitude of the effects is increased.

6. One might argue that patients admitted to a teaching hospital are selected because they are considered candidates for special or experimental treatment. Yet patients in teaching hospitals were not significantly more likely to state that they sought the most advanced, aggressive care available nor that they chose their physicians based on their treatment preferences. Thus, the selection of patients into the university hospital setting does not occur among the patients in this study.

REFERENCES

Similarities in Attitudes Toward Death.” Journal of Gerontology 32:76–89.


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