

PHYSICIANS' EXPERIENCES WITH THE OREGON DEATH WITH DIGNITY ACT

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ABSTRACT

Background Physician-assisted suicide was legalized in Oregon in October 1997. There are data on patients who have received prescriptions for lethal medications and died after taking the medications. There is little information, however, on physicians' experiences with requests for assistance with suicide.

Methods Between February and August 1999, we mailed a questionnaire to physicians who were eligible to prescribe lethal medications under the Oregon Death with Dignity Act.

Results Of 4053 eligible physicians, 2649 (65 percent) returned the survey. Of the respondents, 144 (5 percent) had received a total of 221 requests for prescriptions for lethal medications since October 1997. We received information on the outcome in 165 patients (complete information for 143 patients and partial for an additional 22). The mean age of the patients was 68 years; 76 percent had an estimated life expectancy of less than six months. Thirty-five percent requested a prescription from another physician. Twenty-nine patients (18 percent) received prescriptions, and 17 (10 percent) died from taking the prescribed medication. Twenty percent of the patients had symptoms of depression; none of these patients received a prescription for a lethal medication. In the case of 68 patients, including 11 who received prescriptions and 8 who died by taking the prescribed medication, the physician implemented at least one substantive palliative intervention, such as control of pain or other symptoms, referral to a hospice program, a consultation, or a trial of antidepressant medication. Forty-six percent of the patients for whom substantive interventions were made changed their minds about assisted suicide, as compared with 15 percent of those for whom no substantive interventions were made ($P < 0.001$).

Conclusions Our data indicate that in Oregon, physicians grant about 1 in 6 requests for a prescription for a lethal medication and that 1 in 10 requests actually results in suicide. Substantive palliative interventions lead some — but not all — patients to change their minds about assisted suicide. (N Engl J Med 2000;342:557-63.)

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THE Oregon Death with Dignity Act, enacted on October 27, 1997, legalized physician-assisted suicide in the state of Oregon.¹ This law allows the physician who has primary responsibility for managing a patient's terminal illness to prescribe a dose of lethal medication, which the patient may administer. The prognosis (death with-

in 6 months) must be confirmed by a consultant, and the patient must make two oral requests and one written request over a period of 15 days. Referral to a mental health professional is required if either the attending physician or the consultant is concerned that the patient's judgment may be impaired by a mental disorder.

Physicians are required to report to the Oregon Health Division that they have prescribed the medication and complied with the act's safeguards. The Oregon Health Division has reported information on 57 patients who received prescriptions for lethal medications in 1998 and 1999, including 43 who died after administering the medications themselves.^{2,3} These reports have been limited to patients who actually received prescriptions and do not provide information on physicians' experiences with requests for assistance with suicide.

We surveyed physicians in Oregon who were eligible to prescribe lethal medications under the new law. We sought to describe the characteristics of physicians who have received requests for assistance with suicide, the characteristics and outcomes of the patients who requested prescriptions, the reasons for the requests, and any interventions that were carried out or recommended other than the prescription of lethal medications.

METHODS

We mailed a questionnaire to all licensed physicians practicing in Oregon in the fields of internal medicine and its subspecialties, family practice, general practice, gynecology, surgery and its subspecialties, therapeutic radiology, and neurology. The list of physicians was purchased from the Oregon Board of Medical Examiners. We excluded physicians in training.

The questionnaire was based on those used in previous studies of this issue⁴⁻⁷ and on discussions with physicians in Oregon who had received requests for assistance with suicide and who had provided such assistance. Faculty members and scholars of the Project on Death in America, members of the Task Force to Improve the Care of Terminally Ill Oregonians, and physicians known to be strongly for or against the legalization of assisted suicide reviewed the questionnaire. It was refined after pretesting with a convenience sample of 20 physicians, including 6 who had prescribed medications under the provisions of the Oregon Death with Dignity Act.

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Physicians were asked to provide information about patients who had requested a prescription for a lethal medication only if the patient was terminally ill, if the request was explicitly for a lethal prescription, and if the request was made after November 1997. The Oregon Death with Dignity Act requires that a consultant evaluate the patient to determine whether he or she meets the criteria outlined in the law for assisted suicide. We asked that only attending physicians, not consultants, complete the questionnaire in order to minimize the possibility of receiving duplicate information.

For most of the questions, there were forced-choice responses. We asked about the physicians' attitudes toward the law and their willingness to prescribe lethal medications according to its provisions. We also asked about demographic and clinical characteristics of the patients who had requested assistance with suicide, and the outcomes, as well as whether, on the basis of the physician's conversations with the patient, a particular value, condition, or symptom was an important factor in the decision to request the prescription. The physicians reported interventions other than a prescription for a lethal medication that they had recommended or implemented and described, in response to an open-ended question, interventions that had altered the patient's desire for assisted suicide.

To identify cases in which two or more physicians might be reporting information about the same patient, we matched patients for age within one year, sex, marital status, disease, and the size of the community in which the patient lived. When two or more physicians reported information that may have pertained to the same patient, we used the information from the physician who had seen the patient most recently, unless this physician did not complete the questionnaire.

We mailed the questionnaire in February 1999, with a reminder postcard sent two weeks later; a second copy of the questionnaire was sent to nonrespondents in March 1999, with a simultaneous fax or telephone call. In May 1999, after 47 percent of the sample had responded, we sent nonrespondents a third copy of the questionnaire with a check for \$25, a letter of endorsement from the governor of Oregon, John Kitzhaber, M.D., and a simultaneous fax. Returned questionnaires were accepted through August 1999.

The survey was anonymous and therefore exempt from the requirement for informed consent by the institutional review board of Oregon Health Sciences University. To allow tracking of the questionnaires, each return envelope was coded with an identifying number. The questionnaire was separated from the identifying envelope on receipt and was then given a new identifying number to ensure anonymity. Completed questionnaires were scanned into an electronic data base.

Summary statistics included proportions for categorical variables and means and standard deviations for continuous variables. We used Pearson's chi-square test to analyze associations between variables.⁸

RESULTS

We identified 4544 physicians who were potentially eligible for inclusion in the survey from the list provided by the Oregon Board of Medical Examiners. On the basis of telephone calls, data bases of physicians in training, and returned questionnaires, we determined that 209 physicians were in training, 201 were retired or not in practice for another reason, 73 were no longer practicing in Oregon, and 8 had died. Of the remaining 4053 eligible physicians, 2649 (65 percent) returned the questionnaire.

One hundred forty-four respondents (5 percent) reported that they had received a total of 221 requests for lethal prescriptions after November 1997. Nine requests appeared to have been reported by more than one physician. Six other requests were ex-

cluded because we could not determine whether the data were duplicated. Of the remaining 206 requests, we received complete information on 143 and partial information on 22. Thus, the number of responses to specific questions varied. Twenty-seven physicians reported that they had received a total of 41 requests but gave no information about the patients. Physicians who supported the Oregon Death with Dignity Act were more likely to give partial or complete information than those who opposed the act or neither supported nor opposed it ($P=0.007$).

Physicians' Characteristics

Eighty-four percent of the respondents were internists, general practitioners, or family practitioners (Table 1). Of the 69 internists who received requests for assistance with suicide, 24 had training in a subspecialty, including 11 in oncology and 6 in pulmonology. Forty-one physicians practiced in communities with populations of fewer than 25,000 residents. Seventy-one percent of the physicians had cared for six or more terminally ill patients, and 58 percent had referred six or more patients to a hospice program in the previous 12 months. Fifty-five percent supported the Oregon Death with Dignity Act, and 51 percent were willing to prescribe a lethal medication for a terminally ill patient. In the previous four years, 127 respondents (88 percent) had sought to improve their knowledge of the use of pain medications in the terminally ill "somewhat" or "a great deal," 110 (76 percent) had sought to improve their ability to recognize psychiatric illnesses such as depression in the terminally ill "somewhat" or "a great deal," and 124 (86 percent) reported that their confidence in the use of pain medications in the terminally ill had improved "somewhat" or "a great deal."

Patients' Characteristics

Seven requests for assistance with suicide were made in 1997, 112 in 1998, and 29 in 1999; in 17 cases, the year was not specified. The mean age of the 165 who requested assistance was 68 years, 97 percent were white, 52 percent were men, 46 percent were married, 5 percent (8 of 157) had not completed high school, and 2 percent had no medical insurance (Table 2). Four patients had lived in Oregon for less than six months, but only one patient had moved to the state specifically because of the availability of physician-assisted suicide. Cancer was the most common diagnosis.

At the time of the request for assistance with suicide, 32 percent of the patients (45 of 141) were receiving hospice services, 59 percent (84 of 143) were confined to a bed or chair for more than half their waking hours, and 76 percent (108 of 142) had an estimated life expectancy of less than six months. In 41 percent of cases (58 of 140), the request was associated with an acute deterioration in the patient's

TABLE 1. CHARACTERISTICS OF 144 PHYSICIANS IN OREGON WHO RECEIVED REQUESTS FOR PRESCRIPTIONS FOR LETHAL MEDICATIONS.

CHARACTERISTIC	No. (%)
Specialty	
Internal medicine	69 (48)
Family or general practice	52 (36)
General surgery or surgical subspecialty	12 (8)
Neurology	4 (3)
Gynecology	3 (2)
Radiation oncology	3 (2)
Other	1 (1)
Practice setting*	
Private or group practice	117 (81)
Health maintenance organization	16 (11)
Medical school	9 (6)
Other	7 (5)
Attitude toward Oregon Death with Dignity Act	
Strongly support	41 (28)
Support	38 (26)
Neither support nor oppose	25 (17)
Oppose	20 (14)
Strongly oppose	20 (14)
Willing to prescribe lethal medication	
Yes	73 (51)
Uncertain	18 (12)
No	53 (37)
No. of terminally ill patients cared for in past 12 mo	
0	2 (1)
1–5	40 (28)
6–20	63 (44)
≥21	39 (27)
No. of requests received since November 1997	
1	112 (78)
2–3	26 (18)
≥4	6 (4)

*Some physicians practiced in more than one setting.

medical condition. According to the physician's assessment, 20 percent of the patients had symptoms of depression, but 93 percent were competent to make medical decisions. For 80 percent of the patients (114 of 143), family members knew about the request, and the physician spoke to a family member about the request in the case of 73 percent of the patients (105 of 143). Thirteen patients kept their intentions from their family, seven patients had no family to inform, and for nine patients, the physician did not know whether the family was aware of the request.

Symptoms that were an important consideration in the decision to request a prescription for a lethal medication (whether the patient had the symptom at the time of the request or anticipated it) were pain (for 43 percent of patients), fatigue (for 31 percent), and dyspnea (for 27 percent) (Fig. 1). The most common conditions and values that played an important part in the patient's decision were loss of independence (for 57 percent of patients), poor quality of life (for 55 percent), readiness to die (for 54 percent), and a desire to control the circumstances of death (for

TABLE 2. CHARACTERISTICS OF 165 PATIENTS WHO REQUESTED PRESCRIPTIONS FOR LETHAL MEDICATIONS.

CHARACTERISTIC	No./TOTAL No. (%)*
Male sex	83/160 (52)
White race	150/154 (97)
Marital status	
Married or living as married	72/158 (46)
Divorced, widowed, or never married	82/158 (52)
Unknown	4/158 (3)
Type and size of community	
Rural or small town (<25,000)	54/158 (34)
Medium-size town (25,000–250,000)	53/158 (34)
Large city or suburb (>250,000)	51/158 (32)
Terminal disease†‡	
Cancer	106/158 (67)
End-stage cardiopulmonary disease	29/158 (18)
Neurologic disease	15/158 (9)
AIDS	4/158 (3)
Other	13/158 (8)
Health insurance†	
Medicare	63/143 (44)
Health maintenance organization	23/143 (16)
Other managed care	20/143 (14)
Fee for service	17/143 (12)
Oregon Health Plan (Medicaid)	11/143 (8)
Military coverage	4/143 (3)
None	3/143 (2)
Unknown	18/143 (13)
Enrolled in hospice program at time of request	
Yes	45/141 (32)
No	96/141 (68)
Competent to make decisions	
Yes	144/155 (93)
Uncertain	8/155 (5)
No	3/155 (2)
Symptoms of depression	
Yes	28/143 (20)
No	115/143 (80)
Had requested a prescription for a lethal medication from another physician	57/161 (35)

*The numbers of responses to each item vary because of missing data.

†Some physicians chose more than one response.

‡AIDS denotes the acquired immunodeficiency syndrome. Other diseases included diabetes mellitus, end-stage renal disease, severe anemia, and a coagulation disorder.

53 percent). Uncommon reasons for requested assistance with suicide were a perception of a financial burden to others (for 11 percent of patients) and lack of social support (for 6 percent).

Physicians' Interventions

Physicians provided information about interventions they recommended or implemented in the case of 142 patients. The most commonly recommended interventions were pain control (for 30 percent), control of other physical symptoms (for 30 percent), seeking the advice of a colleague (for 28 percent), referral to a hospice program (for 27 percent), a mental

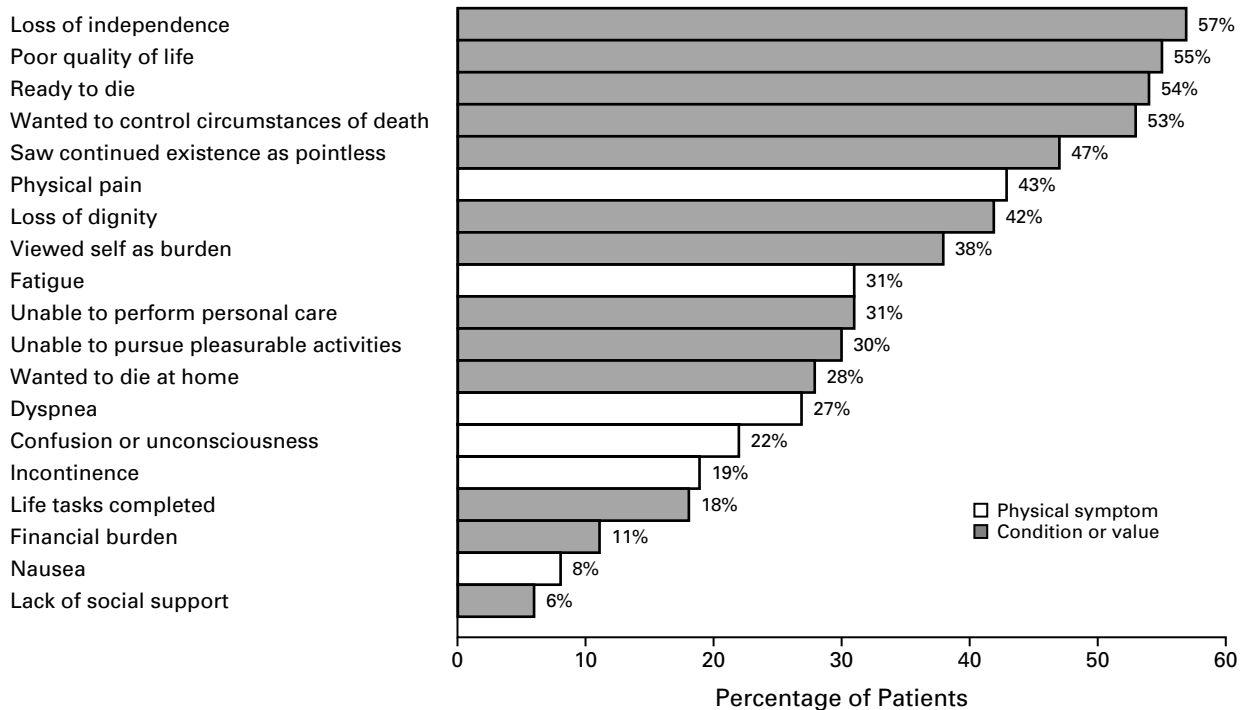


Figure 1. Reasons for Requesting Prescriptions for Lethal Medications.

A total of 143 patients gave their physicians a specific reason for the request. Some patients gave more than one reason.

health consultation (for 20 percent), a trial of antidepressant or anti-anxiety medication (for 18 percent), withdrawal of food and water as another means to hasten death (for 16 percent), a palliative-care consultation (for 13 percent), a social-work consultation (for 11 percent), a consultation with a chaplain (for 10 percent), and a transfer to another physician (for 9 percent). Interventions were implemented in approximately half the instances in which they were recommended. Physicians reported that in the cases of 42 of 140 patients, one or more interventions altered the patient's desire for a prescription for a lethal medication. These interventions included the control of pain and other symptoms (in the case of 11 patients); referral to a hospice program, general reassurance, and specific reassurance that the prescription would be made available (8 each); treatment of depression, a social-work consultation resulting in the provision of services to the family, and an alternative means of hastening death (3 each); and a palliative-care consultation (1).

In the case of 68 patients, including 11 of those who received prescriptions for lethal medications and 8 who died by taking a lethal medication, the physician implemented at least one substantive intervention (control of pain or other symptoms; referral to a hospice program; a mental health, social-work, chaplaincy, or palliative-care consultation; or a trial of an-

tidepressant medication) or sought the advice of a colleague. Patients for whom a substantive intervention was made were more likely to change their minds about wanting a prescription for a lethal medication (31 of 67) than were those for whom no substantive intervention was made (11 of 73) ($P < 0.001$). A total of 28 patients received medications for depression or anxiety or were evaluated by a mental health practitioner; 3 of the 28 changed their minds about obtaining a prescription for a lethal medication. Substantive interventions were made for 21 of the 42 patients (50 percent) enrolled in a health maintenance organization or other managed-care plan, as compared with 47 of the 101 patients (47 percent) who did not have this kind of insurance coverage ($P = 0.70$). Of the 18 patients who received lethal prescriptions in the absence of other substantive interventions, 11 were already receiving hospice care.

Thirty-five percent of the patients requested a prescription for a lethal medication from a physician other than the respondent (Table 2). Twenty-seven patients were referred to 17 of the respondents specifically because of the patient's interest in receiving a prescription for a lethal medication. Fifteen of the 27 patients received prescriptions from the physicians to whom they were referred, and 7 died after taking the medication. Reflecting this referral process, 27 percent of the respondents (38 of 143) had known the patient

for less than one month at the time of the request for assistance with suicide. In the group of 27 patients who had been referred to a physician in our survey specifically to receive a lethal prescription, substantive interventions were recommended for 20 patients and were implemented for 7. Despite the interventions, five of the seven patients died by assisted suicide.

Patients' Experiences

Physicians reported the outcomes for 165 patients. Twenty-nine received prescriptions for lethal medications, and 17 died after administering them (Table 3). Of the 136 patients who did not receive prescriptions, 20 percent died before all the provisions of the Oregon Death with Dignity Act had been met, 15 percent did not meet the legal criteria for receiving a prescription, and 15 percent changed their minds. Among the 44 patients who died before the physician completed the questionnaire, who were eligible to receive a prescription for a lethal medication under the act, who lived through the waiting period, and who requested a prescription from a physician willing to prescribe it, 17 (39 percent) died by taking a prescribed lethal medication.

Fifty-nine percent of the respondents who practiced in small towns supported the law, but physicians in small towns were unlikely to prescribe lethal medications (Table 4). A request for assistance with suicide was less likely to be honored if the patient perceived himself or herself as a burden to others or was depressed and was more likely to be honored if the patient was enrolled in a hospice program or wanted to control the manner of his or her death or if cancer was the terminal disease. Patients who received prescriptions for lethal medications and those who did not receive them did not differ with respect to any other variables that we examined.

Respondents provided additional information about 28 patients who received prescriptions for lethal medications, including 16 who died after administering the medications. In all cases, the respondent obtained an opinion from another physician with respect to the patient's prognosis and treatment options. At the time the prescription was written, 13 patients were thought to have one to six months to live, and 15 were thought to have less than one month to live. Twenty-two patients were confined to bed or a chair during more than 50 percent of their waking hours. In the case of 18 patients, less than four weeks elapsed between the request for a prescription and its receipt.

Thirteen patients who died by assisted suicide were enrolled in a hospice program. In one case, a hospice refused to provide services because of the patient's interest in assisted suicide, and in another case, a patient refused hospice care. In nine cases, the physician was present when the patient took the medication. The time to death was noted in the case of 10 patients — 3 died more than five hours after taking

TABLE 3. OUTCOMES OF 165 REQUESTS FOR ASSISTANCE WITH SUICIDE.

OUTCOME	No./TOTAL No. (%)
Patient received prescription	29/165 (18)
Patient died after administering prescription	17/29 (59)
Patient died from other causes	11/29 (38)
Patient still alive at time of survey	1/29 (3)
Patient did not receive prescription*	136/165 (82)
Physician not willing to provide prescription in this case	30/136 (22)
Physician not willing to provide prescription in any case	40/136 (29)
Patient did not meet legal criteria	21/136 (15)
Patient changed mind before completing requirements	21/136 (15)
Patient died before completing requirements	27/136 (20)
Patient completed requirements and was eligible but did not receive prescription†	10/136 (7)
Physician had not completed evaluation at time of survey	7/136 (5)

*In some cases, more than one response was chosen.

†The patient did not receive the prescription because he or she died before receiving it (in three cases), the patient changed his or her mind (two), the physician was not willing to prescribe lethal medication (two), or for unknown reasons (three).

TABLE 4. CHARACTERISTICS OF PHYSICIANS AND PATIENTS ACCORDING TO WHETHER THE PATIENT RECEIVED A PRESCRIPTION FOR A LETHAL MEDICATION.*

CHARACTERISTIC	RECEIVED PRESCRIPTION	DID NOT RECEIVE PRESCRIPTION	P VALUE
	no./total no. (%)		
Physicians			
Practice in community of <25,000 residents	1/29 (3)	38/136 (28)	0.005
Attitude toward Oregon Death with Dignity Act			<0.001
Support	28/29 (97)	75/136 (55)	
Neither support nor oppose	1/29 (3)	21/136 (15)	
Oppose	0/29	40/136 (29)	
Patients			
Cancer as terminal disease	24/29 (83)	82/129 (64)	0.05
Hospice care	17/29 (59)	28/112 (25)	<0.001
Symptoms of depression	0/29	29/114 (25)	0.003
View of self as burden	3/29 (10)	54/114 (47)	0.001
Desire for control over death	24/29 (83)	51/113 (45)	<0.001

*The numbers of responses to each item vary because of missing data.

the lethal medication. There were no reported adverse events, although one patient who was still conscious 30 minutes after taking the lethal medication was given more of the medication to take.

Problems Reported by Physicians

Some physicians who provided assistance with suicide under the Oregon Death with Dignity Act reported problems, including unwanted publicity (three physicians), difficulty obtaining the lethal medication or a second opinion (three), difficulty understanding the requirements of the law (three), difficulties with hospice providers (one), not knowing the patient (one), or the absence of someone to discuss the situation with (one). The law requires that the physician confidentially report the prescription for the lethal medication to the Oregon Health Division. Twenty-seven of the physicians had met this requirement by the time they completed the questionnaire. Some physicians were concerned about reporting because they feared that the patient's privacy (in 16 cases), their own privacy (in 18), or the privacy of the patient's family (in 15) would be violated or that retroactive sanctions would be imposed by the Drug Enforcement Agency (in 7). Four physicians expressed ambivalence about having provided assistance with suicide, though two of the four noted that they had become less ambivalent over time. One of these physicians decided not to provide such assistance again.

DISCUSSION

We surveyed physicians in Oregon who were eligible to provide assistance with suicide under the Oregon Death with Dignity Act, in order to obtain information about their experiences with requests for prescriptions for lethal medications from terminally ill patients. One hundred forty-four physicians received a total of 221 requests and gave information on the outcomes for 165 patients, of whom 29 received prescriptions for lethal medications.

There is concern that with the legalization of assisted suicide, women, poor persons, and those who are members of ethnic or racial minority groups may request assistance with suicide because of inadequate social support or lack of access to health care.⁹⁻¹³ The demographic characteristics of the patients who requested assistance with suicide in our survey were almost identical to those of members of the general population of Oregon who died. In 1998, 2 percent of all decedents in Oregon lacked health insurance for hospice care. In 1996, 97 percent of Oregon decedents were white, and 51 percent were men.^{14,15} Moreover, concern about finances and lack of social support were rarely the reasons that patients gave for requesting assistance with suicide. The type of health care coverage was not associated with whether the patient received a prescription or whether another intervention was made. More than a third of the pa-

tients requested assistance with suicide because they perceived themselves as a burden to others, but only three of these patients received prescriptions for lethal medications, suggesting that the physicians were reluctant to accede to requests for assistance under these circumstances.

In the Netherlands, two thirds of requests for assistance with suicide or euthanasia are rescinded, often as the result of palliative interventions.¹⁶ Similarly, we found that 39 percent of eligible patients who survived the 15-day waiting period and requested a prescription from a physician willing to provide it died by taking lethal medications that were prescribed for them. Substantive interventions by the physician led many patients to change their minds about assisted suicide. However, some patients who wanted to obtain a prescription were very determined to do so, despite palliative interventions.^{2,17} Thirty-five percent of the patients had requested a prescription from at least one other physician. Eighty-one percent of those who died by assisted suicide were enrolled in a hospice program.

Twenty percent of the patients had symptoms of depression, a finding that is similar to the reported prevalence of depression in patients with terminal illnesses.¹⁸ Depression has been reported in 59 to 100 percent of terminally ill persons interested in assisted suicide or another means of hastening death and in 80 percent of patients with cancer who committed suicide.^{10,19,20} We could not determine whether depression was in fact less common in persons in Oregon who requested a prescription for a lethal medication or whether the physicians failed to detect depression in some instances. Nonetheless, most of the respondents reported that they had made efforts to improve their ability to recognize depression in terminally ill patients. Only 11 percent of the patients who either received a trial of medication for depression or anxiety or were evaluated by a mental health expert changed their minds about obtaining a prescription for a lethal medication.

Our study has several sources of bias and potential error. We do not know the experiences of the 35 percent of physicians who did not return the questionnaire. We may have underestimated duplicate patient information if physicians erred in reporting the demographic characteristics of patients. Physicians who were opposed to or uncertain about the Oregon Death with Dignity Act were significantly less likely to provide complete information about patients than were physicians who favored the act. Because of this response bias, it is difficult to make general statements about the perceptions and interventions recommended by physicians in our sample who were opposed to assisted suicide. Finally, although the physicians were instructed to base information about patients' reasons for requesting assistance with suicide only on conversations with the patients, this method of obtain-

ing information is not as reliable as surveying patients directly.

In conclusion, after two years of legalized assisted suicide in Oregon, we found little evidence that vulnerable groups have been given prescriptions for lethal medication in lieu of palliative care. Physicians granted 1 in 6 requests for a prescription, and 1 in 10 requests actually resulted in suicide. As a result of palliative interventions, some patients, though not all, changed their minds about assisted suicide.

Supported by grants from the Greenwall Foundation and the Gerbode Foundation. Dr. Ganzini is a faculty scholar of the Open Society Institute's Project on Death in America. The views expressed in this article are those of the authors and do not necessarily represent the views of the Department of Veterans Affairs, Oregon Health Sciences University, or the Providence Health System.

We are indebted to the members of the Task Force to Improve the Care of Terminally Ill Oregonians; to the faculty members and scholars of the Project on Death in America; and to Oregon governor John Kitzhaber, M.D., Joseph D. Bloom, M.D., Carol A. Emmons, Ph.D., Pam Edwards, M.D., and Barbara Coombs Lee, R.N., J.D., for assistance in developing and completing the survey.

REFERENCES

1. Oregon Death with Dignity Act, Rev. Stat. §§ 127.800-.897.
2. Chin AE, Hedberg K, Higginson GK, Fleming DW. Legalized physician-assisted suicide in Oregon — the first year's experience. *N Engl J Med* 1999;340:577-83.
3. Sullivan AD, Hedberg K, Fleming DW. Legalized physician-assisted suicide in Oregon — the second year. *N Engl J Med* 2000;342:598-604.
4. Emanuel EJ, Clarridge BR, Moyer R, Schnipper L. 1997-98 ASCO survey on end of life care. Boston: University of Massachusetts Center for Survey Research, 1998.
5. Lee MA, Nelson HD, Tilden VP, Ganzini L, Schmidt TA, Tolle SW. Legalizing assisted suicide — views of physicians in Oregon. *N Engl J Med* 1996;334:310-5.
6. Meier DE, Emmons C-A, Wallenstein S, Quill T, Morrison RS, Cassel CK. A national survey of physician-assisted suicide and euthanasia in the United States. *N Engl J Med* 1998;338:1193-201.
7. Back AL, Wallace JI, Starks HE, Pearlman RA. Physician-assisted suicide and euthanasia in Washington State: patient requests and physician responses. *JAMA* 1996;275:919-25.
8. Fisher LD, van Belle G. Biostatistics: a methodology for the health sciences. New York: John Wiley, 1993.
9. Foley KM. Competent care for the dying instead of physician-assisted suicide. *N Engl J Med* 1997;336:54-8.
10. Chochinov HM, Wilson KG, Enns M, et al. Desire for death in the terminally ill. *Am J Psychiatry* 1995;152:1185-201.
11. Faber-Langendoen K. Death by request: assisted suicide and the oncologist. *Cancer* 1998;82:35-41.
12. Singer PA, Siegler M. Euthanasia — a critique. *N Engl J Med* 1990;322:1881-3.
13. Physician-assisted suicide: toward a comprehensive understanding: report of the Task Force on Physician-assisted Suicide of the Society for Health and Human Values. *Acad Med* 1995;70:583-90.
14. Tolle SW. Care of the dying: clinical and financial lessons from the Oregon experience. *Ann Intern Med* 1998;128:567-8.
15. Oregon Health Division. Oregon vital statistics annual report, 1996. Vol. 12. Portland, Ore.: Center for Health Statistics, 1997.
16. Van Der Maas PJ, Van Delden JJM, Pijnenborg L, Looman CW. Euthanasia and other medical decisions concerning the end of life. *Lancet* 1991;338:669-74.
17. Reagan P. Helen. *Lancet* 1999;353:1265-7.
18. Breitbart W, Chochinov HM, Passik S. Psychiatric aspects of palliative care. In: Doyle D, Hanks GWC, MacDonald N, eds. Oxford textbook of palliative medicine. 2nd ed. Oxford, England: Oxford University Press, 1998:933-54.
19. Henriksson MM, Isometsa ET, Hietanen PS, Aro HM, Lonnqvist JK. Mental disorders in cancer suicides. *J Affect Disord* 1995;36:11-20.
20. Brown JH, Henteleff P, Barakat S, Rowe CJ. Is it normal for terminally ill patients to desire death? *Am J Psychiatry* 1986;143:208-11.

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