Fifth Annual Report on Oregon's Death with Dignity Act

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Summary

Physician-assisted suicide (PAS) has been legal in Oregon since November 1997, when the Death with Dignity Act was approved by Oregon voters for the second time (see History, page 6). In this fifth annual report, we characterize the 38 Oregonians who ingested legally-prescribed lethal medications during 2002, and look at whether the numbers and characteristics of these patients differ from those who used PAS in prior years. Patients choosing PAS were identified through mandated physician and pharmacy reporting. Our information comes from these reports, physician interviews and death certificates. We also compare the demographic characteristics of patients participating during 1998-2002 with other Oregonians who died of the same underlying causes.

Mandated reporting of prescriptions written for lethal medication provides the Department of Human Services (DHS) with a unique opportunity to describe terminally-ill patients choosing legal PAS. Both the number of prescriptions written and the number of Oregonians using PAS have increased over the five years that PAS has been legal in Oregon. In 2002, a total of 58 prescriptions of lethal doses of medication were written by 33 physicians. The number of prescriptions written has increased over the five years since legalization: 44 prescriptions were written in 2001, 39 prescriptions were written in 2000, 33 in 1999, and 24 in 1998. Thirty-six of the fifth-year prescription recipients died after ingesting the medication, 16 died from their illness, and six were alive on December 31, 2002. In addition, two patients who received prescriptions during 2001 died in 2002 after ingesting their medication for a total of 38 PAS deaths during 2002. The number of patients ingesting lethal medication has also increased over the five years since legalization. The 38 PAS deaths in 2002 compares to 21 in 2001, 27 in 2000, 27 in 1999, and 16 in 1998 [1-5]. The 38 patients who ingested lethal medications in 2002 represent an estimated 13/10,000 total deaths, compared with 6/10,000 in 1998 and 9/10,000 in both 1999 and 2000, and 7/10,000 in 2001. As in previous years, the majority of participants in 2002 were older (median age 69 years), well educated (50% had had some college), and had cancer (84%).

During the past five years, the 129 patients who took lethal medications differed in some ways from the 42,274 Oregonians dying from the same underlying diseases; rates of participation in PAS decreased with age, but were higher among those who were divorced, those with more years of education, and those with terminal cancer or amyotrophic lateral sclerosis (see Patient Characteristics, page 11).

Physicians indicated that patient requests for lethal medications stemmed from multiple concerns related to autonomy and control at the end of life. The three most commonly mentioned end-of-life concerns during 2002 were: loss of autonomy, a decreasing ability to participate in activities that made life enjoyable, and losing control of bodily functions (see End of Life Concerns, page 13).

In May 2001, Eli Lilly stopped producing secobarbital. As supplies dwindled, physicians began prescribing pentobarbital and Tuinal. During 2002, two patients (5%) ingested secobarbital (one prescription was written in 2001, the other in 2002), two (5%) used Tuinal, and 34 (90%) ingested pentobarbital. When secobarbital was available, nearly all prescriptions were written for 9 grams, but as physicians began using pentobarbital, prescriptions were written for either 9 grams or 10 grams. The median interval between ingestion and death varied by medication and dose: 30 minutes when 9 grams of secobarbital were prescribed, 60 minutes when 9 grams of pentobarbital were prescribed, 15 minutes when 10 grams of pentobarbital were prescribed (see Lethal Medication, page 12).

During 2002, after ingesting the prescribed medication, one patient coughed for 10-15 seconds, expectorating some clear mucoid material and another patient vomited; three patients ingested only a portion of the medication before falling asleep (see Complications, page 13). One-half of patients became unconscious within five minutes and died within 20 minutes. The range of time from ingestion to death was five minutes to 14 hours. Emergency medical services were not called for any patient.

Although the number of Oregonians ingesting legally prescribed lethal medications has increased, the overall number of terminally ill patients ingesting lethal medication has remained small with fewer than 1/8 of one percent of Oregonians dying by physician-assisted suicide.

Introduction

This fifth annual report reviews the monitoring and data collection system that was implemented under Oregon's Death with Dignity Act, which legalizes physician-assisted suicide for terminally ill Oregon residents. This report summarizes the information collected on patients and physicians who participated in the Act in its fifth year of implementation (January 1, 2002 to December 31, 2002) and examines trends over the five years since legalization. Using physician reports and interviews, and death certificates, we address the following questions: Are the number of residents using legal PAS in Oregon increasing? Do patients who participated in 2002 resemble patients using PAS in previous years and other Oregonians dying from similar diseases? Have any changes occurred in the PAS process during the past five years?

History

The Oregon Death with Dignity Act was a citizen's initiative first passed by Oregon voters in November 1994 with 51% in favor. Implementation was delayed by a legal injunction, but after proceedings that included a petition denied by the United States Supreme Court, the Ninth Circuit Court of Appeals lifted the injunction on October 27, 1997. In November 1997, a measure asking Oregon voters to repeal the Death with Dignity Act was placed on the general election ballot (Measure 51, authorized by Oregon House Bill 2954). Voters rejected this measure by a margin of 60% to 40%, retaining the Death with Dignity Act. After voters reaffirmed the Death with Dignity Act (DWDA) in 1997, Oregon became the only state allowing legal physician-assisted suicide (PAS) [6].

Although physician-assisted suicide has been legal in Oregon for five years, it remains highly controversial. On November 6, 2001, US Attorney General John Ashcroft issued a new interpretation of the Controlled Substances Act, which would prohibit doctors from prescribing controlled substances for use in physician-assisted suicide. To date, all the medications prescribed under the Act have been barbiturates, which are controlled substances and therefore, would be prohibited by this ruling for use in PAS.

In response to a lawsuit filed by the state of Oregon, on November 20, 2001, a US district court issued a temporary restraining order against Ashcroft's ruling pending a new hearing within 5 months. On April 17, 2002, U.S. District Court Judge Robert Jones upheld the Death with Dignity Act. In September 2002, Attorney General Ashcroft filed an appeal, asking the 9th U.S. Circuit Court of Appeals to lift the District Court's ruling. At this time, Oregon's law remains in effect.

Requirements

The Death with Dignity Act allows terminally-ill Oregon residents to obtain and use prescriptions from their physicians for self-administered, lethal medications. Under the Act, ending one's life in accordance with the law does not constitute suicide. However, we use the term "physician-assisted suicide" because it is used in the medical literature to describe ending life through the voluntary self-administration of lethal medications prescribed by a physician for that purpose. The Death with Dignity Act legalizes PAS, but specifically prohibits euthanasia, where a physician or other person directly administers a medication to end another's life. [6]

To request a prescription for lethal medications, the Death with Dignity Act requires that a patient must be:

- An adult (18 years of age or older),
- A resident of Oregon,
- Capable (defined as able to make and communicate health care decisions),
- Diagnosed with a terminal illness that will lead to death within six months.

Patients meeting these requirements are eligible to request a prescription for lethal medication from a licensed Oregon physician. To receive a prescription for lethal medication, the following steps must be fulfilled:

- The patient must make two oral requests to their physician, separated by at least 15 days.

- The patient must provide a written request to their physician, signed in the presence of two witnesses.
- The prescribing physician and a consulting physician must confirm the diagnosis and prognosis.
- The prescribing physician and a consulting physician must determine whether the patient is capable.
- If either physician believes the patient's judgment is impaired by a psychiatric or psychological disorder, the patient must be referred for a psychological examination.
- The prescribing physician must inform the patient of feasible alternatives to assisted suicide including comfort care, hospice care, and pain control.
- The prescribing physician must request, but may not require, the patient to notify their next-of-kin of the prescription request.

To comply with the law, physicians must report to the DHS all prescriptions for lethal medications [7]. Reporting is not required if patients begin the request process but never receive a prescription. In the summer of 1999, the Oregon legislature added a requirement that pharmacists must be informed of the prescribed medication's ultimate use. Physicians and patients who adhere to the requirements of the Act are protected from criminal prosecution, and the choice of legal physician-assisted suicide cannot affect the status of a patient's health or life insurance policies. Physicians and health care systems are under no obligation to participate in the Death with Dignity Act [6].

Methods

The Reporting System

The DHS is required by the Act to develop a reporting system for monitoring and collecting information on PAS [6]. To fulfill this mandate, the DHS uses a system involving physician prescription reports, death certificate reviews, and followup interviews [7].

When a prescription for lethal medication is written, the physician must submit to the DHS information that documents compliance with the law. We review all physician reports and contact physicians regarding missing or discrepant data. DHS Vital Records files are searched periodically for death certificates that correspond to physician reports. These death certificates allow us to confirm patients' deaths, and provide patient demographic data (e.g., age, place of residence, level of education).

In addition, using our authority to conduct special studies of morbidity and mortality [8], DHS conducted telephone interviews with prescribing physicians after receipt of the patients' death certificates. Each physician was asked to confirm whether the patient took the lethal medications. If the patient had taken the medications, we asked physicians for information that was not available from physician reports or death certificates--including insurance status and enrollment in hospice. We asked why the patient requested a prescription, specifically exploring concerns about the financial impact of the illness, loss of autonomy, decreasing ability to participate in activities that make life enjoyable, being a burden, loss of control of bodily functions, and uncontrollable pain. We collected information on the time to unconsciousness and death, and asked about any adverse reactions. Because physicians are not legally required to be present when a patient ingests the medication, not all have information about what happened when the patient ingested the medication. If the prescribing physician was not present, we accepted information they had based on discussions with family members, friends or other health professionals who attended the patients' deaths. We do not interview or collect any information from patients prior to their death. Reporting forms and the physician questionnaire are available at http://www.dhs.state.or.us/publichealth/chs/pas/pasforms.cfm

Data Analyses

We classified patients by year of participation based on when they ingested the legally-prescribed lethal medication. Using demographic information from 1997-2001 Oregon death certificates (the most recent years for which complete data are available), we compared patients who used legal PAS with other Oregonians who died from the same diseases. PAS rates were computed using the number of deaths from the same causes as the denominator. The chi-square, chi-square for trend, and Mann-Whitney U tests were used to test for statistical significance.

Results

In addition to this electronic report, some results are presented in a letter published in the *New England Journal of Medicine* (http://www.nejm.org) [5].

Both the number of prescriptions written and the number of Oregonians using PAS have increased over the five years that PAS has been legal in Oregon. In 2002, 58 prescriptions for lethal doses of medication were written by 33 physicians. This compares to 44 prescriptions written in 2001, 39 in 2000, 33 in 1999 and 24 in 1998. Thirty-six of the patients who received prescriptions during 2002 died after ingesting the lethal medication and 6 were alive on December 31, 2002. In addition, two patients who received their prescriptions during 2001 died in 2002 after ingesting lethal medications for a total of 38 PAS deaths during 2002. This compares to 21 deaths in 2001, 27 deaths in 2000, 27 deaths in 1999, and 16 deaths in 1998.

Patients participating in 2002 were similar to those in previous years except that more males and persons without a college degree used PAS (Table 1). Similar to previous years, most patients (84%) choosing PAS had cancer.

During 2001, a total of 30,128 Oregonians died. Thus, patients ingesting lethal medications in 2002 represented an estimated 13/10,000 total Oregon deaths. By comparison, 2001 patients represented 7/10,000 deaths, 2000 and 1999 PAS patients, 9/10,000 deaths, and 1998 PAS patients represented 6/10,000 deaths.

Patient Characteristics

The characteristics of the 129 PAS patients who died in 1998-2002 differed in several ways from the 42,274 Oregonians who died from the same underlying causes. An inverse relationship exists between age and participation with younger patients more likely to use PAS than older patients (Table 2). Although based on relatively few deaths (four), Asian residents were three times more likely to use PAS than were non-hispanic whites. Divorced Oregonians were almost twice as likely to use PAS than their married counterparts. As educational attainment increases, so too does the likelihood of a terminally ill Oregonian choosing to use PAS; compared to those without a high school diploma, college graduates were 6.5 times more likely to use PAS. Finally, the type of

terminal illness was related to use of PAS; residents with cancer and amyotrophic lateral sclerosis (ALS) were more likely to use PAS.

During 2002, all patients died at home and all but one had some form of health insurance (Table 3). As in previous years, most (92%) of the patients who used PAS in 2002 were enrolled in hospice care. The median length of the patient-physician relationship was 11 weeks.

Physician Characteristics

The prescribing physicians of patients who used PAS during 2002 had been in practice a median of 18.5 years. Their medical specialties included: internal medicine (29%), oncology (45%), family medicine (24%), and other (5%). [Note: the sum of the percentages do not equal 100 because some physicians had two specialities.]

Prescribing physicians were present while 13 (34%) of the 38 patients ingested the lethal medications. Among the remaining 25 patients, attendant status was known for 23. Of these individuals, 78% ingested the medication in the presence of another health care provider/volunteer.

No physicians were reported to the Oregon Board of Medical Examiners in 2002.

Lethal Medication

The lethal medications ingested during 2002 differed from those used in previous years. During 1998-2001, secobarbital was the lethal medication prescribed for 83 of the 91 patients (91%). In May 2001, Eli Lilly stopped producing secobarbital. As supplies dwindled, physicians began prescribing pentobarbital and Tuinal. During 2002, two patients (5%) ingested secobarbital (one prescription was written in 2001, the other in 2002) and two used Tuinal, with the remainder (90%) ingesting pentobarbital. The type and amount of medication used affected the interval between ingestion and death. When secobarbital was available, nearly all prescriptions were written for 9 grams, but as physicians began using pentobarbital, prescriptions were written for either 9 grams or 10 grams. During 1998-2002, when 9 grams of secobarbital were prescribed, the median interval between ingestion and death was 30 minutes (n = 65 where the interval between ingestion and death was known), but when 9 grams of pentobarbital were

prescribed the interval doubled to 60 minutes (n = 13). Death occurred more rapidly when 10 grams of pentobarbital were prescribed; half of all deaths occurred within 15 minutes (n = 25), compared to 9 grams of secobarbital (p = 0.006 by the Mann-Whitney U test) or 9 grams of pentobarbital (p = 0.007). Moreover, when 9 grams of secobarbital were prescribed, 26 percent of the patients lived more than an hour after ingestion of the lethal medication compared to 46 percent of patients for whom 9 grams of pentobarbital were prescribed; when 10 grams of pentobarbital were prescribed, no patient lived more than an hour.

Complications

During 2002, after ingesting the prescribed medication, one patient coughed and gagged for 10-15 seconds, expectorating some clear mucoid material and another patient vomited; the first patient died 13 minutes after ingesting the opiate while the other died two hours later. Three patients lived more than six hours after drinking the lethal medication: one participant, who had impaired digestion, lived 14 hours; another, with a complete bowel obstruction, lived nine hours; and a third lived 12 hours for unknown reasons. All three patients had been prescribed 9 grams of either secobarbital, pentobarbital or Tuinal. No patient regained consciousness after taking the medications.

End of Life Concerns

Physicians were asked if, based on discussions with patients, any of six end-of-life concerns might have contributed to the patients' requests for lethal medication (Table 3). In nearly all cases, physicians reported multiple concerns contributing to the request. Four patients (10%) were reported to have one end-of-life concern, 12 (32%) had two concerns, 12 (32%) had three concerns, 7 (18%) had four concerns, and three (8%) had five concerns. The most frequently reported concerns included losing autonomy (84%), a decreasing ability to participate in activities that make life enjoyable (84%), and losing control of bodily functions (47%).

Comments

During the five years since legalization, the number of prescriptions written for physician-assisted suicide and the number of terminally-ill patients taking lethal medication has increased. However, even with this increase the number has remained small compared to the total number of deaths in Oregon, with fewer than 1/8 of one percent of Oregonians dying by PAS. This proportion is consistent with numbers from a survey of Oregon physicians [9]. Overall, smaller numbers of patients appear to use PAS in Oregon compared to the Netherlands [10]. However, as detailed in previous reports [1-4], our numbers are based on a reporting system for terminally-ill patients who legally receive prescriptions for lethal medications, and do not include patients and physicians who may act outside the law.

That educated patients are more likely to choose PAS is consistent with findings that Oregon patients with at least a college degree are more likely to be knowledgeable about end-of-life choices [11].

Over the last five years the rate of PAS among patients with ALS in Oregon has been substantially higher than among patients with other illnesses. This finding is consistent with other studies. In the Netherlands, where both PAS and euthanasia are openly practiced, one in five ALS patients died as a result of PAS or euthanasia [12]. A study of Oregon and Washington ALS patients found that one-third of these patients discussed wanting PAS in the last month of life [13]. It is not known with certainty why ALS patients appear to be more likely to be interested in choosing PAS than other terminally ill patients.

Over the five years, physicians have consistently reported that concern about loss of autonomy and participation in activities that make life enjoyable have been important motivating factors in patient requests for lethal medication across all five years. Interviews with family members during 1999 corroborated physician reports [2]. These findings were supported by a recent study of hospice nurses and social workers caring for PAS patients in Oregon [14].

The availability of PAS may have led to efforts to improve end-of-life care through other modalities. While it may be common for patients with a terminal illness to

consider PAS, a request for PAS can be an opportunity for a medical provider to explore with patients their fears and wishes around end-of-life care, and to make patients aware of other options. Often once the provider has addressed patients' concerns, they may choose not to pursue PAS [15]. The availability of PAS as an option in Oregon also may have spurred Oregon doctors to address other end-of life care options more effectively. In one study Oregon physicians reported that, since the passage of the Death with Dignity Act in 1994, they had made efforts to improve their knowledge of the use of pain medications in the terminally-ill, to improve their recognition of psychiatric disorders such as depression, and to refer patients more frequently to hospice [16].

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Table 1: Death with Dignity Act participant demographics. Based on death certificate data and physician interviews for 129 patients who died after ingesting a lethal dose of medication – Oregon, 1998-2002.

Characteristics	2002 (N=38)*	1998-2001 (N =91)*	Total (N=129)*
Age - Median, years (range)	69 (38-92)	69 (25-94)	69 (25-94)
Race			
White, non-Hispanic (%)	37 (97)	88 (97)	125 (97)
Asian (%)	1 (3)	3 (3)	4 (3)
Sex – Male (%)	27 (71)	44 (48)	71 (55)
Marital status			
Married (%)	20 (53)	40 (44)	60 (47)
Widowed (%)	7 (18)	22 (24)	29 (22)
Divorced (%)	9 (24)	23 (25)	32 (25)
Never married (%)	2 (5)	6 (7)	8 (6)
Education			
Less than high school graduate (%)	4 (10)	10 (11)	14 (11)
High school graduate (%)	15 (40)	28 (31)	43 (33)
Some college (%)	9 (24)	14 (15)	23 (18)
Bachelor's degree or higher (%)	10 (26)	39 (43)	49 (38)
Residence			
Portland metropolitan area (%)	15 (40)	33 (36)	48 (37)
Other Oregon (%)	23 (60)	58 (64)	81 (63)
Underlying Illness			
Cancer (%)	32 (84)	70 (77)	102 (79)
Lung	*7*	*17*	*24*
Pancreas	*5*	*7*	*12*
Breast	*1*	*9*	*10*
Prostate	*2*	*6*	*8*
Ovary	*2*	*6*	*8*
Colon	*2*	*5*	*7*
Other	*13*	*20*	*33*
Other diseases (%)	6 (16)	21 (23)	27 (21)
Amyotrophic Lateral Sclerosis	*3*	*7*	*10*
*Chronic Lower Respiratory Disease***	*1*	*7*	*8*
Other[+]	*2*	*7*	*9*

* Unknowns are excluded when calculating percentages.

** Formerly Chronic Obstructive Pulmonary Disease.

[+] Includes acquired immune deficiency syndrome, congestive heart failure, aortic stenosis, valvular heart disease, scleroderma, Shy-Drager syndrome, and interstitial pulmonary disease with fibrosis.

Table adapted from "Five Years of Legal Physician-Assisted Suicide in Oregon." N Engl J Med 2003;348:961-4. See http://www.nejm.org.

Table 2: Demographic and disease characteristics of 129 patients who died during 1998-2002 after ingesting a lethal dose of medication compared with 42,274 Oregonians dying of the same underlying diseases.

Characteristics	PAS Patients 1998-2002 (N=129)		Oregon deaths, same diseases (N=42,274)*		DWDA deaths per 10,000 Oregon deaths	Rate Ratio (95% CI)	
Age							
25-34 yr. (%)	2	(2)	142	(<1)	140.8	12.2	(2.7-55.3)†
35-44 yr. (%)	3	(2)	762	(2)	39.4	3.4	(0.9-12.4)
45-54 yr. (%)	10	(8)	2,563	(6)	39.0	3.4	(1.4-8.1)
55-64 yr. (%)	21	(16)	5,184	(12)	40.5	3.5	(1.7-7.5)
65-74 yr. (%)	46	(36)	10,610	(25)	43.4	3.8	(1.9-7.4)
75-84 yr. (%)	37	(29)	14,295	(34)	25.9	2.2	(1.1-4.5)
≥85 yr. (%)	10	(8)	8,678	(21)	11.5	1.0	
Mean, years	69		74				
Race							
White (%)	125	(97)	41,159	(97)	30.4	1.0	
Asian (%)	4	(3)	436	(1)	91.7	3.0	(1.1-8.1)‡
Unknown	-		*9*				
Sex							
Male (%)	71	(55)	20,963	(50)	33.9	1.2	(0.9-1.8)
Female (%)	58	(45)	21,311	(50)	27.2	1.0	
Marital status							
Married (%)	60	(47)	20,583	(49)	29.2	1.0	
Widowed (%)	29	(22)	14,132	(33)	20.5	0.7	(0.4-1.1)
Divorced (%)	32	(25)	5,869	(18)	54.5	1.9	(1.2-2.9)‡
Never married (%)	8	(6)	1,614	(4)	49.6	1.7	(0.8-3.6)
Unknown	-		*76*				
Education							
Less than high school (%)	14	(11)	10,397	(25)	13.5	1.0	
HS graduate (%)	43	(33)	18,093	(43)	23.8	1.8	(1.0-3.2)
Some college (%)	23	(18)	7,584	(18)	30.3	2.3	(1.2-4.4)
Baccalaureate or higher (%)	49	(38)	5,601	(13)	87.5	6.5	(3.6-11.8)†
Unknown	-		*599*				
Residence							
Portland metropolitan (%)	48	(37)	15,070	(36)	31.9	1.1	(0.8-1.5)
Other Oregon (%)	81	(63)	27,204	(64)	29.8	1.0	
Underlying Illness							
Cancer (%)	102	(79)	16,723	(40)	61.0	11.9	(6.0-23.6)‡
ALS (%)	10	(8)	267	(1)	374.5	73.3	(30.0-178.9)‡
COPD (%)	8	(6)	7,673	(18)	10.4	2.0	(0.8-5.3)
Other diseases (%)	9	(7)	17,611	(42)	5.1	1.0	

* Unknowns are excluded when calculating percentages.
† The ratio is statistically significant according to the chi-square for trend test.
‡ The ratio is statistically significant according to the chi-square test.

Table adapted from "Five Years of Legal Physician-Assisted Suicide in Oregon." N Engl J Med 2003;348:961-4. See http://www.nejm.org.

Table 3: Death with Dignity Act participant end of life care and DWDA utilization. Based on physician interviews for 129 patients who died after ingesting a lethal dose of medication – Oregon, 1998-2002.

Characteristics	2002 (N =38)*	1998-2001 (N=91)*	Total (N=129)*
End of life care			
Hospice			
Enrolled (%)	35 (92)	71 (80)	106 (83)
Declined by patient (%)	3 (8)	18 (20)	21 (17)
Unknown	*-*	*2*	*2*
Insurance			
Private (%)	24 (63)	56 (64)	80 (64)
Medicare or Medicaid (%)	13 (34)	31 (35)	44 (35)
None (%)	1 (3)	1 (1)	2 (2)
Unknown	*-*	*3*	*3*
End of life concerns[+] *(available for 17 patients in 2001)*			
Losing autonomy (%)	32 (84)	74 (85)	106 (85)
Decreasing ability to participate in activities that make life enjoyable (%)	32 (84)	67 (77)	99 (79)
Losing control of bodily functions (%)	18 (47)	55 (63)	73 (58)
Burden on family, friends/caregivers (%)	14 (37)	30 (34)	44 (35)
Inadequate pain control (%)[**]	10 (26)	18 (21)	28 (22)
Financial implications of treatment (%)	1 (3)	2 (2)	3 (2)
PAS process			
Referred for psychiatric evaluation (%)	5 (13)	23 (27)	28 (23)
Patient died at			
Home (patient, family or friend) (%)	38 (100)	82 (91)	120 (94)
Long term care, assisted living or foster care facility (%)	0 -	6 (7)	6 (5)
Hospital (%)	0 -	1 (1)	1 (1)
Other (%)	0 -	1 (1)	1 (1)
Unknown	*-*	*1*	*1*
Lethal Medication			
Secobarbital (%)	2 (5)	83 (91)	85 (66)
Pentobarbital (%)	34 (90)	7 (8)	41 (32)
Tuinal (%)	2 (5)	0 -	2 (2)
Other (%)	0 -	1 (1)	1 (1)
Health Care Provider Present when Medication Ingested			
Prescribing Physician (%)	13 (34)	47 (52)	60 (47)
Other Provider, prescribing physician not present (%)††	18 (78)	11 (92)	29 (83)
Unknown	*2*	*-*	*2*

Characteristics (continued)	2002 (N = 38)	1998-2001 (N = 91)*	Total (N = 129)*
Regurgitation/seizures after medication ingested			
Regurgitated (%)	2 (5)	2 (2)	4 (3)
Seizures (%)	0 -	0 -	0 -
Neither (%)	36 (95)	85 (98)	121 (97)
Unknown	-	*4*	*4*
Emergency medical services			
Called after lethal medication ingested (%)	0 -	0 -	0 -
Not called after lethal medication ingested (%)	38 (100)	88 (100)	126 (100)
Unknown	-	*3*	*3*
Timing of PAS events			
Duration (weeks) of patient-physician relationship			
Median	11	14	13
Range	0-379	0-851	0-851
Duration (days) between 1st request and death			
Median	49	42	43
Range	16-329	15-466	15-466
Minutes between ingestion and unconsciousness			
Median	5	5	5
Range	1-30	1-38	1-38
Number unknown	*2*	*16*	*18*
Minutes between ingestion and death			
Median	20	30	30
Range	5 m.-14 hrs.	4 m.-37 hrs.	4 m.-37 hrs.
Number unknown	*1*	*11*	*12*

* Unknowns are excluded when calculating percentages unless otherwise noted.
+ Affirmative answers only ("Don't know" included in negative answers).
** Patients discussing concern about inadequate pain control with their physicians were not necessarily experiencing pain.
†† Physicians were surveyed for the first time in 2001 about the presence of another health care provider if they themselves were not present.

Table adapted from "Five Years of Legal Physician-Assisted Suicide in Oregon." N Engl J Med 2003;348:961-4. See http://www.nejm.org.