

Oregon's Death with Dignity Act: Three years of legalized physician-assisted suicide



Department of Human Services
Oregon Health Division
Center for Disease Prevention and Epidemiology

February 22, 2001



**Oregon's Death with Dignity Act:
Three years of legalized physician-assisted suicide**

For more information contact:

Katrina Hedberg, M.D., M.P.H.

Oregon Health Division

800 N. E. Oregon Street, Suite 730

Portland, OR 97232

E-mail: katrina.hedberg@state.or.us

Phone: 503-731-4273

Fax: 503-731-4082

Acknowledgements

This assessment was conducted as part of the required surveillance and public health practice activities of the Oregon Health Division and was supported by Division funds.

SUMMARY

In 1997, physician-assisted suicide (PAS) became legal in Oregon. In this report, we describe Oregonians who ingested legally-prescribed lethal medications during the third year (2000) of legalized PAS, and look at whether the numbers and characteristics of these patients differ from those who used PAS in 1998 and 1999. Patients choosing PAS were identified through mandated physician reporting. Our information comes from these reports, physician interviews and death certificates. We also compared third-year patients with other Oregonians who died of similar underlying diseases, evaluating demographic factors of age, sex, race, marital status, education, and residence in the Portland metro area.

In 2000, a total of 39 prescriptions for lethal doses of medication were written, compared with 24 in 1998 and 33 in 1999. Twenty-six of the third-year prescription recipients died after ingesting the medication; eight died from their underlying disease; five were alive on December 31, 2000. In addition, one 1999 prescription recipient died in 2000 after ingesting the medication. In total, 27 patients ingested legally prescribed lethal medication in 2000 (26 patients who received prescriptions in 2000; 1 patient who received a prescription in 1999). During 1998 and 1999, 16 and 27 patients, respectively, died after ingesting the medications.

The 27 patients who ingested lethal medications in 2000 represented an estimated 9/10,000 total Oregon deaths, compared with 6/10,000 in 1998 and 9/10,000 in 1999. Patients participating in 2000 were demographically similar to those participating in previous years, except that they were increasingly likely to be married. The proportion of married participants in years two and three resembled that seen among the 6,981 other Oregonians dying from similar underlying illnesses. Overall, the patients who participated in 2000 were demographically comparable to other Oregonians who died from similar underlying illnesses, with the exception of educational

attainment. Patients having a college or post-baccalaureate education were very much more likely to participate.

We interviewed the 22 physicians who legally prescribed lethal medications for the 27 PAS patients in 2000. One physician was reported to the Oregon Board of Medical Examiners for submitting a written consent form with only one signature, although other witnesses were in attendance. Physicians were present at 14 (52%) of the 27 legal PAS deaths. Physicians continued to report that multiple patient end-of-life concerns contributed to patients' requests for lethal medications, with an increase in patients including concern about being a burden on family, friends, and caregivers.

The number of terminally ill patients using lethal medication in 2000 remains small, and is unchanged from 1999. Patients using PAS are better educated, but otherwise demographically comparable to other Oregonians dying of similar diseases. Physicians reported that patient concern about becoming a burden has increased during the last three years, though all patients expressed multiple concerns in the third year.

INTRODUCTION

After voters reaffirmed the Death with Dignity Act (DWDA) in 1997, Oregon became the only state allowing legal physician-assisted suicide (PAS) [1]. Mandated reporting of prescriptions for lethal medication provides the Oregon Health Division (OHD) with a unique opportunity to describe terminally ill patients choosing legal PAS. During 1998 and 1999, 16 and 27 patients, respectively, used PAS [2,3]. In these first two years we looked at demographic factors – such as age, sex, race, marital status, education, and residence in the Portland metro area – and reasons why patients choose to request a prescription for lethal medication. Demographically, patients using PAS were better educated than other Oregonians dying of similar diseases. Physician and family members indicated that patient requests for lethal medications stemmed from multiple concerns related to autonomy and control at the end of life [3].

This report reviews the monitoring and data collection system that was implemented under the law, and summarizes the information collected on patients and physicians who participated in the Act in its third year of implementation (January 1, 2000 to December 31, 2000). Using physician reports and interviews, and death certificates, we address the following three questions: Are numbers of patients using legal PAS in Oregon increasing? Do patients who participated in 2000 demographically resemble patients using PAS in previous years and other Oregonians dying from similar diseases? Do physician reports indicate differences in patients' motivations for using PAS over the past three years?

The Oregon Death with Dignity Act

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.

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. [1]

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 6 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, witnessed request to their physician (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 OHD all prescriptions for lethal medications [4]. 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 [1].

The Reporting System

The OHD is required by the Act to develop a reporting system for monitoring and collecting information on PAS [1]. To fulfill this mandate, the OHD uses a system involving physician prescription reports and death certificate reviews [4].

When a prescription for lethal medication is written, the physician must submit to the OHD information that documents compliance with the law (see previous section). We review all physician reports and contact physicians

regarding missing or discrepant data. OHD 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 (for example, age, place of residence, level of education).

For this report, we also included telephone interviews conducted with all prescribing physicians after receipt of their patients' death certificate. Each physician was asked to confirm whether the patient took the lethal medications. We also collected data that was not available from physician reports or death certificates – including insurance status and end-of-life care. 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. If the patient took the lethal medication, we collected information on the time to unconsciousness and death, and asked about any unexpected adverse reactions. Physicians are not legally required to be present when a patient ingests the medication, so not all have information about what happened when the patient ingested the medication. Many terminally ill patients have more than one physician providing care at the end of life: to maintain consistency in data collection, we interviewed only prescribing physicians. Information about the prescribing physician – such as age, sex, number of years in practice, and medical specialty – was collected during the interviews. We do not interview or collect any information from patients prior to their death. Reporting forms and the physician questionnaire are available at

www.ohd.hr.state.or.us/cdpe/chs/pas/pas.htm.

Data Collection and Analyses

We classified patients by year of participation based on when they ingested the legally-prescribed lethal medication. Using demographic information from 1999 Oregon death certificates, we compared patients who used legal PAS with other Oregonians who died from similar diseases. The proportion of deaths resulting from legal PAS was estimated for 2000 using total and disease-specific 1999 deaths in the denominator.

Proportions were compared using Pearson's chi-square test or Fisher's exact test. Trends were assessed using a two-sided Cochran-Armitage Trend Test. Continuous variables were compared using T-tests or Kuskal-Wallis Tests. Unadjusted relative risks with 95% confidence intervals (CIs) were estimated to compare participating patients to the 1999 death cohort. Statistical calculations were performed using SAS [5].

RESULTS

In addition to this electronic report, some results were presented in a letter published in the New England Journal of Medicine (<http://www.nejm.org>) [6].

In 2000, 39 prescriptions for lethal doses of medication were written, compared with 24 in 1998 and 33 in 1999. Twenty-six of the third-year prescription recipients died after ingesting the medication; eight died from their underlying disease; five were alive on December 31, 2000. In addition, one 1999 prescription recipient died in 2000 after ingesting the medication (one 1999 prescription recipient was alive on December 31, 2000). The total number of patients who used PAS in 2000 was 27 (26 patients who received prescriptions in 2000, and 1 patient who received a prescription in 1999).

During 1998 and 1999, 16 and 27 patients, respectively, died after ingesting the medications.

Based on death certificate data, patients participating in 2000 were similar to those in previous years, except that they were increasingly likely to be married (Cochran-Armitage Trend Test, $p=0.001$; Table 1). Of 13 third-year patients with at least a college degree, eight had post-baccalaureate education (Table 1). In all three years most patients choosing PAS had cancer (Table 1).

During 1999, a total of 29,356 Oregonians died. Thus, patients ingesting lethal medications in 2000 represented an estimated 9/10,000 total Oregon deaths. By comparison, 1998 PAS patients represented 6/10,000 deaths; 1999 PAS patients, 9/10,000 deaths. The 27 patients participating in 2000 resembled 6,981 other Oregonians who died from similar underlying illnesses with respect to age, race, and residence (Table 2). However, as education increased so did likelihood of participation (Cochran-Armitage Trend Test, $P<0.001$). Patients with a college education were eight times more likely to participate than people without a high school education (95% Confidence Interval [2-43]); patients with post-baccalaureate education were 19 times more likely to participate than people without a high school education (95% Confidence Interval [4-88]; Table 2).

We interviewed the 22 physicians who legally prescribed lethal medications to the 27 PAS patients in 2000. Thirteen (59%) physicians were in family practice or internal medicine, five (23%) were oncologists, and four were in other specialties. Their median age was 50 years (range 34-58 years); their median years in practice, 21 (range 1-29 years). One physician was reported to the Oregon Board of Medical Examiners for submitting a written consent form with only one signature, although other witnesses were in attendance.

As in previous years, most of the patients who used PAS in 2000 were enrolled in hospice care. Of the three who declined hospice, two patients felt they did not need it, and one patient did not wish to stop treatment (a requirement for hospice). Almost all patients died at home. No patient died in an acute-care hospital. All patients in 2000 appeared to have some form of health insurance, though not all physicians knew the type of insurance. At least 16 (64%) of 25 patients with a known insurance type had private health insurance (Table 3).

Physicians were present at 14 (52%) of the 27 legal PAS deaths. If physicians were not present, we accepted information they had based on discussions with family members, friends or other health professionals who attended the patients' deaths. Among the patients for whom we received information about the time of ingestion and death, half of the patients were unconscious within 9 minutes of taking the medication, and half died within 30 minutes (Table 3). At least one patient was unconscious for up to six hours after ingesting the medication, but the actual time to death was not known. One patient regurgitated approximately 10 ml of secobarbital suspension immediately after ingestion. This patient became unconscious within 1 minute of ingestion and died within 7 minutes. No physician reported activation of the emergency medical system after medication ingestion.

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 all cases, physicians reported multiple concerns contributing to the request. Eleven (41%) patients included at least four specific concerns: becoming a burden, losing autonomy, decreasing ability to participate in activities that make life enjoyable, and losing control of bodily functions. Another 15 (56%) patients included at least two or three of these concerns. Most frequently noted across all three years were loss of

autonomy (2000, 93%; 1999, 78%; 1998, 75%) and participation in activities that make life enjoyable (2000, 78%; 1999, 81%; 1998, 69%). Patients have increasingly expressed concern about becoming a burden to family friends or caregivers (2000, 63%; 1999, 26%; 1998, 12%; Cochran-Armitage Trend Test, $p < 0.001$). All but one patient expressing this concern in 2000 also expressed concern about losing autonomy. One patient, concerned about the financial implications of treating or prolonging their illness, was also concerned about all other issues except pain control.

COMMENTS

The numbers of patients choosing legal PAS has remained small over the last three years (6-9/10,000 Oregon deaths per year). While these numbers increased from the first year to the second, the third year's findings indicated that this increase was not part of a trend. In fact, the numbers of patients choosing PAS remained consistent from year two to year three. In each year, the proportion of PAS deaths as a subset of deaths due to terminal illnesses such as cancers is of the same magnitude as recently estimated by Emanuel, *et al.* [7], and is consistent with numbers from a survey of Oregon physicians [8]. Overall, smaller numbers of patients appear to use PAS in the U.S. compared to the Netherlands [7,9]. However, as detailed in previous reports [2,3], 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.

After the first year's report, the relatively low proportion of married persons participating led to concerns that socially isolated patients might be more likely to use PAS than patients with better social support [10]. An increasing proportion of married participants in years two and three now

shows that the proportions of PAS patients married, widowed, divorced or never married resemble those seen among other Oregonians dying from similar diseases. Also, in the second year it was observed that college educated patients were 12 times more likely to choose PAS compared to patients with less than a high school degree [3]. In this third year we considered patients with a post-baccalaureate education separately, and found the difference to be even greater. 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].

Concern about loss of autonomy and participation in activities that make life enjoyable have been consistently important motivating factors in patient requests for lethal medication. However, the proportion of patients expressing concern about becoming a burden has increased. Consistent with previous findings from family interviews [3], physicians in 2000 commented that family members were very willing to care for the patients. Interestingly, not being a burden was one of only eight end-of-life issues in a recent study rated as important by most patients but not most physicians [12]. That Oregon PAS patients almost always discussed concern about becoming a burden in conjunction with losing autonomy suggests that it might be part of patients' ideas about independence. However, a negative interpretation of concern about becoming a burden is that patients may feel pressured by others into using PAS. No evidence indicates that such pressure has been a primary motivating influence among the 70 Oregon patients participating to date, but this possibility should be discussed by physicians, patients and family members.

PAS has become an important element in the national discussion on end-of-life care. In 2000, Oregon physicians who prescribed lethal medications commented frequently on the role of PAS in this respect. One physician was

an opponent of PAS, but had decided that as a caregiver it was important to support the beliefs of the terminally ill patient. A second physician had previously turned down one patient, but the patient assisted in 2000 “called [the physician] out on [the] responsibility to provide PAS.” Another physician wrote a prescription in consultation with a colleague who supported the patient’s choice but felt uncomfortable providing the prescription itself. In each case, the patients were knowledgeable about end of life choices and had a complex set of end-of-life concerns contributing to their request. While the experiences of these few patients and physicians reflect a rarely chosen end-of-life care alternative, they provide an important source of insight to inform the national debate on end-of-life care.

REFERENCES

1. Oregon Revised Statute 127.800-127.995. Available at www.ohd.hr.state.or.us/cdpe/chs/pas/ors.htm.
2. Chin G, Hedberg K, Higginson G, Fleming D. 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 D. Legalized physician-assisted suicide in Oregon – The second year. *N Engl J Med* 2000;342:598-604.
4. Oregon Administrative Rules 333-009-000 to 333-009-0030. Available at www.ohd.hr.state.or.us/cdpe/chs/pas/oars.htm.
5. SAS Version 6.12. SAS Institute Inc. Cary, North Carolina.
6. Legalized Physician-Assisted Suicide in Oregon, 1998-2000. *N Engl J Med* 2001;344:605-7.
7. Emanuel EJ, Fairclough DL, Emanuel LL. Attitudes and Desires Related to Euthanasia and Physician-Assisted Suicide Among Terminally Ill Patients and Their Caregivers. *JAMA* 2000;284(19):2460-8.
8. Ganzini L, Nelson HD, Schmidt TA, *et al.* Physicians' Experiences with The Oregon Death with Dignity Act. *N Engl J Med*, 2000;342:557-63.
9. Willems DL, Daniels ER, van der Wal G, van der Maas PJ, Emanuel EJ. Attitudes and practices concerning the end of life: a comparison between physicians from the United States and from The Netherlands. *Arch Intern Med* 2000; 160:63-8.
10. Gianelli D. Oregon suicide report contains some surprises. *American Medical News*. March 8, 1999.
11. Silveira MJ, DiPiero A, Gerrity MS, Feudtner C. Patients' Knowledge of Options at the End of Life. *JAMA* 2000;248:2483-8.
12. Steinhauser KE, Christakis NA, Clipp EC, *et al.* Factors Considered Important at the End of Life by Patients, Family, Physicians and Other Care Providers. *JAMA* 2000;284:2476-82.

Table 1: Death with Dignity Act participant demographics. Based on death certificate data and physician interviews for 70 patients who died after ingesting a lethal dose of medication – Oregon, 1998-2000.

Characteristics	2000 (N =27)*	1999 (N=27)*	1998 (N=16)*	Total (N=70)*
Age - Median, years (range)	69 (51-93)	71 (31-87)	70 (25-94)	70 (25-94)
Race				
White (%)	26 (96)	26 (96)	16 (100)	68 (97)
Asian (%)	1 (4)	1 (4)	0 -	2 (3)
Sex – Male (%)	12 (44)	16 (59)	8 (50)	36 (51)
Marital status ⁺				
Married (%)	18 (67)	12 (44)	2 (12)	32 (46)
Widowed (%)	6 (22)	6 (22)	5 (31)	17 (24)
Divorced (%)	3 (11)	8 (30)	5 (31)	16 (23)
Never married (%)	0 -	1 (4)	4 (25)	5 (7)
Education				
Less than high school graduate (%)	2 (8)	2 (7)	3 (19)	7 (10)
High school grad./some college (%)	11 (42)	12 (44)	9 (56)	32 (46)
College graduate (%)	5 (19)	13 (48) [#]	4 (25) [#]	30 (43) [#]
Post-baccalaureate degree (%)	8 (31)			
Unknown	1	-	-	1
Residence				
Portland metropolitan area (%)	9 (33)	10 (37)	7 (44)	26 (37)
Other Oregon (%)	18 (67)	17 (63)	9 (56)	44 (63)
Underlying Illness				
Cancer (%)	21 (78)	17 (63)	14 (88)	52 (74)
Lung	5	5	5	15
Other**	16	12	9	37
Other diseases (%)	6 (22)	10 (37)	2 (12)	18 (26)
Amyotrophic Lateral Sclerosis	2	4	0	6
Chronic Obstructive Pulmonary Dis.	0	4	1	5
Other ⁺⁺	4	2	1	7

* Unknowns are excluded when calculating percentages.

⁺ The proportion of married patients increased significantly over the three year period (Cochran-Armitage Trend Test, P<0.001).

[#] College and post-baccalaureate combined.

** Includes brain, breast, colon, endometrial, gastroesophageal, liver, oral, ovarian, pancreatic, and prostate cancers, as well as lymphomas and metastatic carcinomas of unknown primary.

⁺⁺ Includes Acquired Immune Deficiency Syndrome, Congestive Heart Failure, multi-system organ failure, and scleroderma

Table adapted from "Legalized Physician-Assisted Suicide in Oregon, 1998-2000." N Engl J Med 2001;344:605-7. See <http://www.nejm.org>.

Table 2: Demographic and disease characteristics of 27 patients who died during 2000 after ingesting a lethal dose of medication compared with 6,964 Oregonians dying of similar causes.

Characteristics	2000 (N=27)*	Oregon deaths, similar diseases (N=6981)*	DWDA deaths per 10,000 Oregon deaths	Estimated Relative Risk (95% CI)**
Age				
Mean, years (SD)	70 (11)	73 (14)	-	-
Race				
White (%)	26 (96)	6733 (97)	38	#
Other (%)	1 (4)	218 (3)	46	0.8 [0.1, 6.2]
<i>Unknown</i>	-	29		
Sex				
Male (%)	12 (44)	3456 (50)	35	#
Female (%)	15 (56)	3525 (50)	42	0.8 [0.4, 1.7]
Marital status				
Married (%)	18 (67)	3486 (50)	51	#
Widowed (%)	6 (22)	2238 (32)	27	0.5 [0.2, 1.3]
Divorced (%)	3 (11)	948 (14)	32	0.6 [0.2, 2.1]
Never married (%)	0 -	296 (4)	-	-
<i>Unknown</i>	-	13		
Education⁺				
Less than high school (%)	2 (8)	1772 (26)	11	#
HS grad/some college (%)	11 (42)	4229 (61)	26	2.3 [0.5, 10.4]
College graduate (%)	5 (19)	523 (8)	95	8.4 [1.6, 43.1]
Post-baccalaureate (%)	8 (31)	379 (5)	207	18.7 [4.0, 88.4]
<i>Unknown</i>	1	77		
Residence				
Portland metropolitan (%)	9 (33)	2474 (35)	36	#
Other Oregon (%)	18 (67)	4507 (65)	40	0.9 [0.4, 2.0]
Underlying Illness				
Cancer (%)	21 (78)	4861 (70)	43	++
Other diseases (%)	6 (22)	2120 (30)	28	++

* Unknowns are excluded when calculating percentages.

** CI=confidence interval.

Reference category

+ Test for trend, p<0.001

++ Cohort for Oregon deaths from similar diseases selected on disease status; thus, no measure of association is calculated for disease.

Table 3: Death with Dignity Act participant end of life care and DWDA utilization. Based on physician interviews for 70 patients who died after ingesting a lethal dose of medication – Oregon, 1998-2000.

Characteristics	2000 (N = 27)*	1999 (N=27)*	1998 (N=16)*	Total (N=70)*
<i>End of life care</i>				
Hospice				
Enrolled (%)	23 (88)	21 (78)	11 (73)	55 (81)
Declined by patient (%)	3 (12)	6 (22)	4 (27)	13 (19)
<i>Unknown</i>	1	-	1	2
Insurance				
Private (%)	16 (64)	17 (65)	9 (56)	42 (63)
Medicare or Medicaid (%)	9 (36)	9 (35)	6 (38)	25 (37)
None (%)	0 -	0 -	1 (6)	1 (1)
<i>Unknown</i>	2	1	-	3
<i>End of life concerns⁺</i>				
Financial implications of treatment (%)	1 (4)	0 -	0 -	1 (1)
Burden on family, friends / caregivers (%) [#]	17 (63)	7 (26)	2 (12)	26 (37)
Losing autonomy (%)	25 (93)	21 (78)	12 (75)	58 (83)
Decreasing ability to participate in activities that make life enjoyable (%)	21 (78)	22 (81)	11 (69)	54 (77)
Losing control of bodily functions (%)	21 (78)	16 (59)	9 (56)	46 (66)
Inadequate pain control (%) ^{**}	8 (30)	7 (26)	2 (12)	17 (24)
Combined concerns				
Burden, autonomy, participation and bodily functions (%)	11 (41)	4 (15)	0 -	15 (21)
Other combination of burden, autonomy, participation and/or bodily functions (%)	15 (56)	17 (63)	13 (81)	45 (64)

<u>Characteristics (continued)</u>	<u>2000 (N =27)*</u>	<u>1999 (N=27)*</u>	<u>1998 (N=16)*</u>	<u>Total (N=70)*</u>
<i>PAS process</i>				
First physician asked wrote prescription				
Yes (%)	11 (44)	8 (31)	8 (53)	27 (41)
No (%)	14 (56)	18 (69)	7 (47)	39 (59)
<i>Unknown</i>	2		1	4
Referred for psychiatric evaluation (%)	5 (19)	10 (37)	5 (31)	20 (29)
Prescribed \geq 9 grams secobarbital (%)	26 (96)	25 (93)	15 (94)	66 (94)
Lethal medication delivered to patient				
By physician (%)	7 (30)	11 (44)	9 (56)	27 (42)
By pharmacist (%) ⁺⁺	15 (65)	13 (52)	5 (31)	33 (52)
By other (%)	1 (4)	1 (4)	2 (13)	4 (6)
<i>Not sure</i>	4	2	-	6
Patient died at				
Home (patient, family or friend) (%)	25 (93)	25 (93)	13 (81)	63 (90)
Long term care, assisted living or foster care facility (%)	2 (7)	2 (7)	3 (19)	7 (10)
Physician present when medication ingested (%)	14 (52)	16 (59)	8 (50)	38 (54)
Regurgitation/seizures after medication ingested				
Regurgitated (%)	1 (4)	0 -	0 -	1 (2)
Seizures (%)	0 -	0 -	0 -	0 -
Neither (%)	24 (96)	26 (100)	15 (100)	65 (98)
<i>Unknown</i>	2	1	1	4
Emergency medical services				
Called after lethal medication ingested (%)	0 -	0 -	0 -	0 -
Not called after lethal medication ingested (%)	24 (100)	27 (100)	16 (100)	67 (100)
<i>Unknown</i>	3	-	-	3

<u>Characteristics (continued)</u>	<u>2000</u> <u>(N =27)*</u>	<u>1999</u> <u>(N=27)*</u>	<u>1998</u> <u>(N=16)*</u>	<u>Total</u> <u>(N=70)*</u>
<i>Timing of PAS events</i>				
Duration (weeks) of patient-physician relationship				
Median	8	22	11	14
Range	1-851	2-816	2-540	1-851
Duration (days) between 1 st request and death ^{##}				
Median	30	83	22	40
Range	15-377	15-289	15-75	15-377
Minutes between ingestion and unconsciousness				
Median	9	10	5	5
Range	1-38	1-30	3-20	1-38
<i>Number unknown</i>	9	3	4	16
Minutes between ingestion and death				
Median	30	30	22	30
Range	5-75	4-1560	10-690	4-1560
<i>Number unknown</i>	8	2	1	11

* Unknowns are excluded when calculating percentages unless otherwise noted.

+ Affirmative answers only ("Don't know" included in negative answers).

Physician reports of patients being concerned about being a burden on families friends or caregivers increased significantly over the three year period (Cochran-Armitage Trend Test, P<0.001).

** Patients discussing concern about inadequate pain control with their physicians were not necessarily experiencing pain.

++ The proportion of patients receiving their medication from a pharmacist increased significantly over the three year period (Cochran-Armitage Trend Test, P<0.001).

The mean time between first request and death varied significantly across the three years (Kruskal-Wallis Test, P=0.009)

Table adapted from "Legalized Physician-Assisted Suicide in Oregon, 1998-2000." N Engl J Med 2001;344:605-7. See <http://www.nejm.org>.