Legal Euthanasia in Belgium

Characteristics of All Reported Euthanasia Cases

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Objectives: To study the reported medical practice of euthanasia in Belgium since implementation of the euthanasia law.

Research Design: Analysis of the anonymous database of all euthanasia cases reported to the Federal Control and Evaluation Committee Euthanasia.

Subjects: All euthanasia cases reported by physicians for review between implementation of the euthanasia law on September 22nd, 2002 and December 31, 2007 (n = 1917).

Measures: Frequency of reported euthanasia cases, characteristics of patients and the decision for euthanasia, drugs used in euthanasia cases, and trends in reported cases over time.

Results: The number of reported euthanasia cases increased every year from 0.23% of all deaths in 2002 to 0.49% in 2007. Compared with all deaths in the population, patients who died by euthanasia were more often younger (82.1% of patients who received euthanasia compared with 49.8% of all deaths were younger than 80, $P < 0.001$), men (52.7% vs. 49.5%, $P = 0.005$), cancer patients (82.5% vs. 23.5%, $P < 0.001$), and more often died at home (42.2% vs. 22.4%, $P < 0.001$). Euthanasia was most often performed with a barbiturate, sometimes in combination with neuromuscular relaxants (92.4%) and seldom with morphine (0.9%). In almost all patients, unbearable physical (95.6%) and/or psychological suffering (68%) were reported. A small minority of cases (6.6%) concerned nonterminal patients, mainly suffering from neuromuscular diseases.

Conclusions: The frequency of reported euthanasia cases has increased every year since legalization. Euthanasia is most often chosen as a last resort at the end of life by younger patients, patients with cancer, and seldom by nonterminal patients.

Key Words: end-of-life care, euthanasia, health policy, medical decision making

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In 2002, Belgium legalized euthanasia. Although there had been studies on the prevalence of euthanasia in Belgium[1,2] before it was legalized, and studies on attitudes towards euthanasia,[3–6] little is known about the actual medical practice of euthanasia since legalization. The euthanasia law allows euthanasia—defined as intentional life-ending by a physician at the explicit request of a patient—on condition that all the due care requirements prescribed in the law are satisfied.[7,8]

To make a legitimate euthanasia request, the patient must be an adult, must be conscious and legally competent at the moment of making the request, and must be in a condition of constant and unbearable physical or psychological suffering resulting from a serious and incurable disorder caused by illness or accident, for which medical treatment is futile and there is no possibility of improvement. The physician decides whether the disorder is incurable based on the actual state of medicine, and the patient alone determines whether suffering is constant and unbearable.[9,10] The physician must have several conversations with the patient in which he ascertains whether the patient experiences his/her suffering as constant and unbearable. The physician must inform the patient about their medical condition, prospects, and possible alternative treatments, including palliative care. He must consult another independent physician about the serious and incurable character of the condition. This physician does not need to be a palliative care specialist. After performing euthanasia, the physician is required to report the case for review to the Federal Control and Evaluation Committee Euthanasia (the Committee). This Committee determines whether the reporting physician has complied with all legal due care requirements.[7] In case of irregularities, the Committee can ask the physician for additional information and send the case to the judicial authorities.[11]

The Belgian euthanasia law is not limited to terminally ill patients who are expected to die within months.[7,12] A euthanasia request from a nonterminal patient who is in the same medical condition as mentioned above may also be granted under the same requirements of careful practice. However, a third physician, a psychiatrist, or specialist in the illness from which the patient suffers, must be consulted, and there must be at least 1 month between request and performance of euthanasia.[7]

Currently, Belgium, The Netherlands, Luxembourg, and the US states of Oregon and Washington are the only places in the world that have legalized euthanasia and/or physician-assisted suicide. More and more countries and states, how-

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ever, are considering legalization. In debates about euthanasia much attention is given to the possibility of effective societal control and to ways in which due care can be guaranteed.[13] Notification of euthanasia by physicians is pivotal to making societal control possible. The information collected by the Committee over the years provides valuable insight into the euthanasia practice in Belgium. In this article, we will present data on all the reported euthanasia cases since implementation of the euthanasia law. In doing so, we aim to provide an overview of the practice of euthanasia in Belgium and offer useful information for countries considering similar legislation.

We will address the following research questions: how many euthanasia cases have been reported in Belgium since implementation of the euthanasia law in 2002? What are the demographic and clinical characteristics of these cases, and do they differ from the characteristics of all deaths in the population? What are the characteristics of the decision and performance of euthanasia? Are there differences in clinical characteristics between terminally ill and nonterminally ill patients receiving euthanasia? And, do the characteristics of euthanasia cases evolve over the years?

METHODS

Data Sources

The data presented in this article are based on the databases of officially reported euthanasia cases in Belgium (Wallonia, Flanders, and Brussels) between the implementation of the euthanasia law on September 22, 2002 and December 31, 2007. This database consists of information collected from the euthanasia registration forms sent in by reporting physicians.[14] The anonymous database was made available to us by the Committee.

Because of the anonymous nature of the notification procedure, it was impossible for the researchers to contact the reporting physicians for more in-depth information, or to match the reported cases to the corresponding death certificates. There were few missing data because the Committee generally contacts the reporting physician for further information when important data are missing (from the registration forms).

We compared characteristics of all reported euthanasia cases with those of all deaths among residents of Flanders and Brussels in the corresponding period (January 1, 2003–December 31, 2007). As death certificate data for Wallonia were not available for this period, we had to rely on data from Flanders and Brussels which comprise about 65% of all deaths in Belgium and are expected to be suitable for comparison as about 83% of all the cases of euthanasia were reported by Dutch speaking physicians living in Flanders or Brussels, and comparison with the most recent available death certificate data for Wallonia (1999) do not show important differences with regard to age, sex, diagnosis, and place of death.

Measurements

The registration form was developed by the Committee and contains both open-ended and closed questions with prestructured response categories.[14] Open-ended questions were encoded into categories by the Committee in the database that we received. Detailed information about the registration form and questions has been described elsewhere.[11]

Statistical Analysis

Fisher exact test was used to compare categorical variables. *P* values that were less than or equal to 0.05 were considered to indicate statistical significance. Statistical calculations were performed with SPSS software version 16 or StatXact software.

RESULTS

Frequency of Reported Euthanasia Cases and Comparison With All Deaths

A total of 1917 euthanasia cases were reported between September 22, 2002 and December 31, 2007. The number of reported cases increased every year (Table 1). Of all cases, 83.3% was reported by Dutch-speaking physicians, 16.7% by French-speaking physicians (not in table).

Table 2 shows patient characteristics of all reported euthanasia cases in Belgium compared with all deaths in Flanders and Brussels. Men, younger patients, and cancer patients were significantly overrepresented in euthanasia cases. Patients of 80 years or more were underrepresented in all places of death and among cancer and noncancer patients (not in tables).

Characteristics of Reported Euthanasia Cases

Characteristics of the decision and performance of euthanasia are displayed in Table 3. For patients who died in hospital, the second physician was most often a specialist (69.7%), and for those who died at home or in a care home, a general practitioner (73.5% and 84.1%, respectively). Palliative care physicians were more often consulted for patients who died in hospital (15.7%) than for those who died at home (7.9%) or in a care home (4.9%) ($P < 0.001$). Physicians in hospitals had consulted additional physicians (38.2% of cases) more often than those at home (29.6% of cases) or in a care home (31.7% of cases) ($P = 0.002$) (not in table).

Table 4 compares clinical characteristics of terminally and nonterminally ill patients. The majority of patients were terminally ill (93.4%). Although most terminal patients suffered from cancer (87.6%), nonterminal patients suffered mostly from other illnesses (90.8%). Psychological suffering

TABLE 1. Frequency of Reported Cases of Euthanasia in Belgium, 2002–2008

Year	No. Deaths	No. Reported Cases of Euthanasia	All Deaths (%)
2002*	105642	24	NA†
2003	103278	235	0.23
2004	101946	347	0.34
2005	103278	388	0.38
2006	101587	428	0.42
2007	100658	495	0.49
2008	NA	705	NA
Total		2622	

*Cases reported from September 22 up to and including December 31.
†NA denotes not available.

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TABLE 2. Patient Characteristics of All Reported Euthanasia Cases 2002–2007 Compared With All Deaths in Belgium (Flanders and Brussels)*

Characteristic	Reported Cases of Euthanasia* N = 1917	All Deaths† N = 265597	P
Sex			0.005
Men	52.7	49.5	
Women	47.3	50.5	
Age			<0.001
1–17	0.0	0.3	
18–39	3.0	2.0	
40–59	26.0	9.5	
60–79	53.1	37.9	
>79	17.9	50.2	
Diagnosis			<0.001
Cancer	82.5	23.5	
Other than cancer	17.5	76.5	
Place of death			<0.001
Hospital	51.7	52.3	
Home	42.2	22.4	
Care home	4.3	22.0	
Other	1.8	3.4	

Data presented are column percentages; p-values calculated with Fisher exact test. Percentages may not always amount to 100% because of rounding.

*Patient characteristics of reported euthanasia cases in 2008 not yet available.

†Deaths statistics of persons older than one year from Flanders and Brussels (Belgium), 2003 to 2007.

TABLE 3. Characteristics of the Decision and Performance of Euthanasia (2002–2007)

Characteristic	All Cases (N = 1917) (%)
Type of request for euthanasia	
Current, voluntary, well-considered, repeated, and written request	97.9
Written advance euthanasia directive*	2.1
Involvement of other caregivers	
Second independent physician consulted†	99.8
Specialty of second independent physician	
Specialist	44.7
General practitioner	42.9
Palliative care physician‡	12.0
Unspecified	0.5
Third independent physician consulted (N = 126)§	100
Specialty of third independent physician	
Psychiatrist	60.3
Specialist	39.7
Additional physicians consulted (beyond legal requirement)	
At least 1 physician consulted	34.2
1 physician	24.2
2 physicians	6.8
3 physicians	2.3
4 physicians	0.7
5 physicians	0.2
6 physicians	0.1
Extra palliative teams¶ (not legally required)	
No palliative teams	65.5
1 palliative team	32.3
2 palliative teams	2.1
3 palliative teams	0.1
Drugs used to perform euthanasia‖	
Barbiturate	34.3
Barbiturate + neuromuscular relaxant	58.1
Morphine alone or in conjunction with sedative	0.9
Other, or unclear from registration form	6.7

Data presented are column percentages. Percentages may not always amount to 100% because of rounding.

*Euthanasia based on a written advance euthanasia directive is only possible for patients who are in an irreversible coma.

†Information was missing for 3 cases. We cannot determine from our data whether these physicians were contacted by the Committee for further information.

‡This percentage may be an underestimation as the question about the second physician's specialty is an open one and physicians were considered to have consulted a palliative care physician only when they explicitly mentioned this.

§A third independent physician must be consulted only if the patient is not considered to be terminally ill, ie, is not expected to die in the near future.[7, 9–11] This physician should either be a psychiatrist or a specialist in the illness from which the patient suffers.

¶Data are available for only 1714 of the reported euthanasia cases. In Belgium there are palliative homecare teams and palliative teams in hospitals. They consist of nurses, (a) physician(s), and a psychologist in hospital teams.

‖Data are available for only 1699 of the reported euthanasia cases.

was reported significantly more often for nonterminal patients (89.7% vs. 66.5%), whereas the reverse was true for physical suffering (96% vs. 89.7%).

Point seven% of all cases concerned nonterminally ill patients who did not suffer physically. Of these 13 patients, 6 had a neuropsychiatric disease and 8 a somatic disease. For all these patients psychological suffering was reported (not in table).

Trends in characteristics of reported euthanasia cases are shown in Table 5. Over the years general practitioners were consulted more often and palliative care physicians less often $P < 0.001$). While the proportion of euthanasia cases in which at least 1 palliative team was consulted remained stable over the years, the proportion of cases in which an extra physician was consulted decreased ($P = 0.017$).

DISCUSSION

Since legalization of euthanasia, the number of cases reported has increased each year. Patients who died by euthanasia were more often younger, men, had cancer, and died at home, compared with all deaths in the population. Euthanasia was most often performed with a barbiturate and seldom with morphine only. In almost all patients, unbearable physical (95.6%) and/or psychological suffering (68%) were reported. A small minority (6.6%) concerned nonterminal patients, mainly with neuromuscular diseases.

By presenting data on all 1917 euthanasia cases reported between 2002 and 2007, our study offers valid information on a highly debated end-of-life practice. Data were obtained from the Committee itself, which systematically contacted physicians when important information was missing from the registration form.[12–14]

There are, however, limitations in the study. As the methods rely on the analyses of secondary data collected as part of the

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TABLE 4. Clinical Characteristics According to Whether the Patient was Terminally Ill or Not Terminally Ill* at the Moment of the Euthanasia (2002–2007)

Characteristic	All Reported Cases of Euthanasia N = 1917	Terminally Ill Patients N = 1790 (93.4)	Nonterminally Ill Patients N = 126 (6.6)	P
Diagnosis				<0.001†
Cancer	82.5	87.6	9.2	
Other than cancer	17.5	12.4	90.8	
Progressive neuromuscular disease	7.3	5.1	37.9	
Cardiovascular disease	2.4	2.0	8.9	
Non-malignant Pulmonary disease	1.9	1.7	4.0	
Nonprogressive neuromuscular disease	1.0	0.2	13.7	
AIDS	0.4	0.3	0.8	
Other	4.5‡	3.1	25.0	
Reported suffering§				
Physical suffering	95.6	96.0	89.7	0.001
Psychological suffering	68.0	66.5	89.7	<0.001
Physical and psychological suffering	64.7	63.7	79.4	0.001
Nature of reported physical suffering¶				
Pain	53.6	54.7	41	0.101
Cachexia, exhaustion	32.5	33.6	20.5	0.095
Dysphagia, vomiting, bowel obstruction	28.3	29.0	20.5	0.260
Dyspnoea	22.9	23.7	12.8	0.119
Severe wounds	5.4	5.9	0	0.119
Hemorrhage	2.8	3.1	0	0.269
Other	25.3	23.5	46.3	0.001
Nature of reported psychological suffering‡				
Loss of dignity/despair	42.5	42.0	47.5	0.503
Dependency	26.1	23.3	57.5	<0.001
Other	1.7	1.4	5.6	0.028

Data presented are column percentages; P values calculated with Fisher exact test. Percentages may not always amount to 100% because of rounding.

*The euthanasia law makes a distinction between patients who are expected to die within the near future and patients who are not expected to die within the near future. Within the near future is defined by the Federal Control and Evaluation Committee as dying within the next few months. Patients who were not expected to die within the near future were patients who were not expected to die within the next few months. It is the attending physician who evaluates the terminality of the patient's disease.

†P value for cancer versus other than cancer.

‡Including, among others, 18 cases of neuropsychiatric disease: depression (n = 5), Huntington disease (n = 5), Alzheimer disease (n = 5), Creutzfeldt-Jacob disease (n = 1), vascular dementia (n = 1), psychosis (n = 1).[9–11]

§For 22 patients no suffering was reported. Seven of these patients were comatose; for the remaining patients, information on the variables of suffering was missing. We could not determine whether the Committee had contacted the physicians for further information.

¶Data for nature of physical and psychological suffering are only available for 499 of the reported euthanasia cases.

notification procedure, certain elements that would have provided completer insight into the studied cases, eg palliative interventions, could not be studied. Furthermore, not all the variables from the registration form were included in the database and some variables were not registered for each year.

Moreover, our data only offer insight into officially reported euthanasia cases. We cannot exclude the possibility that physicians do not always report their cases and that unreported cases differ from reported ones.[15] A possible social desirability bias also has to be taken into account, especially for variables relating to legal due care criteria.

The number of reported euthanasia cases has increased every year since legalization. One explanation could be that the incidence of euthanasia has increased over the years. Belgium has known a strong increase in acceptance of euthanasia among the general population between 1981 and 1999,[16] a trend that may have continued after legalization in 2002, making it plausibly that patients increasingly see euthanasia as an acceptable end-of-life option for themselves. Physicians may also have become more willing to perform euthanasia in a climate where it is no longer illegal. Another explanation could be that physicians have become increasingly more willing to report euthanasia, likely in part, because the Committee has never sent a reported case to the judicial authorities.[12–14]

The majority of euthanasia cases was reported in Dutch, whereas only 17% was reported by French-speaking physicians. To date, there are no empirical data on whether there are perhaps differing medical end-of-life practices in the Dutch-speaking and French-speaking communities, and/or whether there is a difference in willingness to report among physicians of both communities.

As was shown in other research,[17] no evidence was found to support the fear that, once euthanasia is legalized, the lives of elderly patients would be more likely to be ended with assistance

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TABLE 5. Trends in Characteristics of Reported Euthanasia Cases in Belgium (2002–2007)

Characteristic	2002*/2003 (N = 259)	2004 (N = 347)	2005 (N = 388)	2006 (N = 428)	2007 (N = 495)	P
Patient characteristics						
Sex						0.780
Men	49.8	51.9	52.3	53.7	54.3	
Women	50.2	48.1	47.7	46.3	45.7	
Age						0.977
18–39	3.5	2.9	3.6	3.0	2.4	
39–79	79.9	79.0	77.1	78.7	80.4	
>79	16.6	18.2	19.3	18.2	17.2	
Diagnosis						0.597
Cancer	84.3	81.8	85.1	80.6	81.8	
Other than cancer	15.7	18.2	14.9	19.4	18.2	
Prognosis						0.637
Terminally ill	91.5	93.1	93.3	93.9	94.3	
Not terminally ill	8.5	6.9	6.7	6.1	5.7	
Place of death						0.299
Hospital	53.7	55.5	51.8	52.6	47.3	
Home	40.5	38.4	40.5	41.8	47.3	
Care home	4.6	4.3	5.4	3.0	4.2	
Other	1.2	1.7	2.3	2.6	1.2	
Characteristics of the decision						
Type of request for euthanasia						0.021
Current, voluntary, well-considered, repeated, and written request	99.6	98.6	97.9	96.0	98.2	
Written advance euthanasia directive	0.4	1.4	2.1	4.0	1.8	
Involvement of other caregivers						
Specialty of second independent consulted physician						<0.001
Specialist	47.1	42.2	46.9	45.6	42.6	
General practitioner	33.6	41.6	42.2	44.2	48.1	
Palliative care physician	19.3	14.7	10.9	10.0	8.7	
Unspecified	0.0	1.4	0.0	0.2	0.6	
Specialty of third independent physician† (N = 126)						0.294
Psychiatrist	68.2	41.7	65.4	57.7	67.9	
Specialist	31.8	58.3	34.6	42.3	32.1	
Additional physician(s) consulted (beyond legal requirement)	39.0	38.0	34.0	28.0	34.4	0.017
Palliative team(s)‡ consulted (not legally required)	33.9	33.7	31.4	32.5	39.4	0.110

Data presented are column percentages, except total numbers between brackets; *P* values calculated with Fisher exact test. Percentages may not always amount to 100% because of rounding.

*Cases reported from September 22 up to and including December 31, 2002 (N = 24).

†A third independent physician must be consulted only if the patient is not considered to be terminally ill, ie is not expected to die in the near future.[7,9–11]

‡Data are available for only 1714 of the reported euthanasia cases. In Belgium there are palliative homecare teams and palliative teams in hospitals. They consist of nurses, (a) physician(s), and a psychologist in hospital teams.

of a physician.[3,13,18–20] According to our findings, patients of 80 or older were underrepresented among euthanasia cases compared with all deaths even after controlling for diagnosis and place of death. The number of reported euthanasia cases in this age group also did not increase significantly over time. Older patients thus seem not to be at higher or increasing risk of euthanasia after legalization.

Although physicians are required to consult only 1 other physician (or 2 where the patient is not terminally ill) physicians involved additional physicians or palliative care teams in a substantial number of cases. This may indicate that they are aware of the importance of consulting palliative care experts and offering available palliative care options for patients requesting to end their lives, which is consistent with findings that palliative care and euthanasia are often not seen as mutually exclusive alternatives by Belgian caregivers, but rather as integral aspects of good end-of-life care.[21] Another factor that may explain additional consultation is that the majority of Belgian hospitals

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permits euthanasia only if certain palliative care procedures are followed, in addition to those required by law.[22]

Physicians reported unbearable suffering in almost all euthanasia cases. Based on our data, however, we cannot determine whether the reported suffering had been target of intervention. Concerns that euthanasia requests are the result of low quality care or the absence of access to palliative care, are often expressed.[23–25] However, Belgium has a long tradition in palliative care provision integrated in mainstream healthcare and promulgated a law on palliative care almost simultaneously with the legalization of euthanasia, positing the right to palliative care for every patient and substantially increasing its funding.[26–28] Research conducted in Belgium has shown that euthanasia is not related to a lower use of palliative care and often occurs within the context of multidisciplinary care.[29] Nonetheless, our findings reconfirm the importance of not only pain and physical symptom relief at the end of life, but also of integrating psychosocial aspects in palliative care.[30,31]

In conclusion, our study gives insight into the medical practice of euthanasia in Belgium as reported since legalization in 2002. Based on these reported cases, we can conclude that euthanasia is most often chosen as a last resort at the end of life by younger patients and by patients with cancer. Developments over time do not show any indication to support the slippery slope hypothesis. Furthermore, requests for euthanasia from nonterminal patients, some suffering from nonsomatic diseases, can and are being granted under the Belgian euthanasia law, albeit in small and not increasing numbers and under the same strict due care criteria as for terminally ill patients. Further research should focus on estimating the notification rate for euthanasia and should give attention to the unreported practice as well.

REFERENCES

1. van der Heide A, Deliens L, Faisst K, et al; on behalf of the EURELD consortium. End-of-life decision-making in six European countries: descriptive study. *Lancet*. 2003;362:345–350.
2. Deliens L, Mortier F, Bilsen J, et al. End-of-life decisions in medical practice in Flanders, Belgium: a nationwide survey. *Lancet*. 2000;356: 1806–1811.
3. Cohen J, Marcoux I, Bilsen J, et al. Trends in acceptance of euthanasia among the general public in 12 European countries (1981–1999). *Eur J Public Health*. 2006;16:663–669.
4. Bilsen J, Bauwens M, Bernheim J, et al. Physician-assisted death: attitudes and practices of community pharmacists in East Flanders, Belgium. *Palliat Med*. 2005;19:151–157.
5. Verpoort C, Gastmans C, Dierckx de Casterlé B. Palliative care nurses' views on euthanasia. *J Adv Nurs*. 2004;47:592–600.
6. Cohen J, van Delden J, Mortier F, et al; Eureld Consortium. Influence of physicians' life stances on attitudes to end-of-life decisions and actual end-of-life decision-making in six countries. *J Med Ethics*. 2008;34:247–253.
7. Wet betreffende euthanasie 28 Mei, 2002. Belgisch Staatsblad 22 Juni, 2002. Law concerning euthanasia May 28, 2002. Belgian official collection of the laws June 22, 2002 [in Dutch]. Available at: http://www.health.fgov.be/euthanasie.
8. Deliens L, van der Wal G. The euthanasia law in Belgium and The Netherlands. *Lancet*. 2003;362:1239–1240.
9. Nys H. A presentation of the Belgian Act on euthanasia against the background of Dutch euthanasia law. *Eur J Health Law*. 2003;10:239–255.
10. Federale controle– en evaluatiecommissie voor euthanasie. Informatiebrochure voor de artsen, 2006. Federal control and evaluation committee on euthanasia. Information brochure for physicians, 2006 [in Dutch]. 2006. Available at: http://www.senaat.be/www/?MIval=/index_senate&MENUID=12420&LANG=fr.
11. Smets T, Bilsen J, Cohen J, et al. The medical practice of euthanasia in Belgium and The Netherlands: legal notification, control, and evaluation procedures. *Health Policy*. 2009;90:181–187.
12. Federale controle– en evaluatiecommissie voor euthanasie. Eerste verslag aan de wetgevende kamers 22 September 2002–31 December 2003, 2004. Federal control and evaluation committee on euthanasia. Second report to Parliament September 22, 2002–December 31, 2003 [in Dutch and French]. 2004. Available at: http://www.senate.be/www/?MIval=/index_senate&MENUID=12420&LANG=fr.
13. Pollard BJ. Can euthanasia be safely legalized? *Palliat Med*. 2001;15: 61–65.
14. Registratiedocument euthanasie. Belgian registration form euthanasia [in Dutch and French]. 2002. Available at: http://www.health.fgov.be/euthanasie.
15. Federale controle– en evaluatiecommissie voor euthanasie. Tweede verslag aan de wetgevende kamers 1 Januari 2004–31 December 2005, 2006. Federal Control and Evaluation Committee on Euthanasia. Second report to Parliament January 1, 2004–December 31, 2005 [in Dutch and French]. 2006. Available at: http://www.senate.be/www/?MIval=/index_senate&MENUID=12420&LANG=fr.
16. Federale controle– en evaluatiecommissie voor Euthanasie. Derde verslag aan de wetgevende kamers 1 Januari 2006–31 December 2007, 2008. Federal Control and Evaluation Committee on Euthanasia. Second report to Parliament January 1, 2006–December 31, 2007 [in Dutch and French]. 2008. Available at: http://www.senate.be/www/?MIval=/index_senate&MENUID=12420&LANG=fr.
17. Jochemsen H, Keown J. Voluntary euthanasia under control? Further empirical evidence from The Netherlands. *J Med Ethics*. 1999;25:16–21.
18. Battin MP, van der Heide A, Ganzini L, et al. Legal physician-assisted dying in Oregon and The Netherlands: evidence concerning the impact on patients in "vulnerable" groups. *J Med Ethics*. 2007;33:591–597.
19. New York State Task Force on Life and the Law. *When Death is Sought. Assisted Suicide and Euthanasia in the Medical Context*. New York, NY: New York State Task Force on Life and the Law; 1994:p xiii.
20. George RJ, Finlay IG, Jeffrey D. Legalised euthanasia will violate the rights of vulnerable patients. *BMJ*. 2005;331:684–685.
21. Bernheim JL, Deschepper R, Distelmans W, et al. Development of palliative care and legalisation of euthanasia: antagonism or synergy? *BMJ*. 2008;336:864–867.
22. Lemiengre J, Dierckx de Casterlé B, Verbeke G, et al. Ethics policies on euthanasia in hospitals–a survey in Flanders (Belgium). *Health Policy*. 2007;84:170–180.
23. Finlay IG, Wheatley VJ, Izdebski C. The House of Lords Select Committee on the assisted dying for the terminally ill bill: implications for specialist palliative care. *Palliat Med*. 2005;19:444–453.
24. Hermsen MA, ten Have AA. Euthanasia in palliative care journals. *J Pain Symptom Manage*. 2002;23:517–525.
25. Materstvedt LJ, Clark D, Ellershaw J, et al. Euthanasia and physician-assisted suicide: a view from an EAPC Ethics Task Force. *Palliat Med*. 2003;17:97–101.
26. Wet betreffende palliatieve zorg 14 Juni 2002 [Law concerning palliative care Belgium June 14, 2002] (in Dutch), 2002022868, Belgisch Staatsblad 26 Oktober 2002 [Belgian official collection of the laws October 26 2002], (2002).
27. Clark D, ten Have H, Janssens R. Common threads? Palliative care service developments in seven European countries. *Palliat Med*. 2000;14:479–490.
28. Federale evaluatiecel palliatieve zorg. Federal evaluation cel palliative care [in Dutch]. Evaluatierapport Palliatieve Zorg: overzicht van de uitbouw van de palliatieve zorg in België. Evaluation of Palliative Care: overview of palliative care services in Belgium [in Dutch]. Federale evaluatiecel palliatieve zorg. Brussel, Belgium, 2005.
29. Van den Block L, Deschepper R, Bilsen J, et al. How are euthanasia and other end-of-life decisions related to the care provided in the final three months of life? A nationwide study in Belgium. *BMJ*. 2009 jul 30;339:b2772.
30. World Health Organization. *National Cancer Control Programmes: Policies and Managerial Guidelines*. 2nd ed. Geneva, Switzerland: World Health Organization; 2002.
31. Chochinov HM. Dying, dignity, and new horizons in palliative end-of-life care. *CA Cancer J Clin*. 2006;56:84–103.

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