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# Legalisation of euthanasia and assisted suicide: advanced cancer patient opinions – cross-sectional multicentre study

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## ABSTRACT

**Objectives** The French government voted a new law in February 2016 called the Claeys-Leonetti Law, which established the right to deep and continuous sedation, confirmed the ban on euthanasia and ruled out physician-assisted suicide. The aim of this work was to gather the opinion of patients on continuous sedation and the legalisation of medical assistance in dying and to explore determinants associated with favourable and unfavourable opinions.

**Methods** This was a French national prospective multicentre study between 2016 and 2020.

**Results** 331 patients with incurable cancer suffering from locally advanced or metastatic cancer in 14 palliative care units were interviewed. 48.6% of participants expressed a favourable opinion about physician-assisted suicide and 27.2% an unfavourable opinion about its legalisation. Regarding euthanasia, 52% of patients were in favour of its legalisation. In univariate analysis, the only factor determining opinion was belief in God.

**Conclusions** While most healthy French people are in favour of legalising euthanasia, only half of palliative care patients expressed this opinion. Medical palliative care specialists were largely opposed to euthanasia. The only determining factor identified was a cultural factor that was independent of the other studied variables. This common factor was found in other studies conducted on cohorts from other countries. This study contributes to the knowledge and thinking about the impact of patients' personal beliefs and values regarding their opinions about euthanasia and assisted suicide.

**Trial registration number** NCT03664856.

## WHAT IS ALREADY KNOWN ON THIS TOPIC

⇒ This is the first national prospective multicentre study to involve a large number of patients who are directly confronted with end-of-life decisions and affected by terminal conditions, while former studies included healthy participants or carers who were not personally or immediately concerned by the issue.

## WHAT THIS STUDY ADDS

⇒ This study contributes to the knowledge and thinking about the impact of patients' personal beliefs and values regarding their opinions about euthanasia and the legalisation of assisted suicide.

## HOW THIS STUDY MIGHT AFFECT RESEARCH, PRACTICE OR POLICY

⇒ These findings could serve as a basis for lawmakers in France and elsewhere to satisfy the wishes of patients as much as possible and also help caregivers to meet the requirements of patients and follow ethical guidelines within the scope of the law.



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## INTRODUCTION

Societal issues related to end of life and euthanasia have led to substantial public debate worldwide.<sup>1–3</sup> In Europe, legislation on euthanasia differs from one country to another and is legalised in only four countries.<sup>4</sup> Currently, physician-assisted suicide is legal in five US states and Switzerland.<sup>4</sup> French law considers euthanasia to be 'the act of a third party who deliberately ends a person's life with

**KEY STATEMENTS**

- ⇒ Continuous sedation and medical assistance in dying
  - ⇒ To gather opinions of patients with advanced cancer.
  - ⇒ To establish determinants of opinions.
- ⇒ Regarding physician-assisted suicide and euthanasia, incurable patients were:
  - ⇒ More favourable to it than palliative care specialists.
  - ⇒ Less favourable to it than healthy people.
- ⇒ The societal debate on end of life must consider the opinions of people at the end of life.

the intention of putting an end to a situation deemed unbearable', while physician-assisted suicide is considered to be suicide by a patient facilitated by means or by information provided by a physician aware of the patient's intent. In France, calls to legalise physician-assisted suicide and euthanasia have increased, and public interest in the subject has grown in recent years despite its prohibition. The first law to be promulgated in France regulated patients' rights and end-of-life care and is called the Leonetti Law. It explicitly allows physicians to provide far-reaching symptom control, even at the risk of shortening life, in order to relieve the person's suffering at an advanced stage of a serious and incurable disease while prohibiting physician-assisted suicide and euthanasia. A new law in February 2016 called the Claeys-Leonetti Law established the right to deep and continuous sedation at the patient's request, consisting of sedative and analgesic treatment leading to a profound and continuous change of vigilance until death if the patient is likely to suffer pain, associated with the cessation of all life-sustaining treatments including artificial nutrition and hydration. In a patient who cannot express his/her wishes, the physician discontinues a life-sustaining treatment to avoid unreasonable obstinacy. In this case, the physician implements continuous deep sedation until death to be sure that the patient will not suffer.<sup>5</sup> The law also confirmed the ban on euthanasia per se. However, while 96% of French people have been found to be in favour of euthanasia, fewer than 50% of physicians are.<sup>6</sup> We conducted a first feasibility study that explored opinions about euthanasia among patients receiving palliative care.<sup>7</sup> It showed that patients with an incurable disease such as cancer in an end-of-life setting are probably more reticent to legalise euthanasia than the healthy general population. A second single-centre study by our team reported determinants of opinions about euthanasia in palliative care patients with cancer.<sup>8</sup> This study concerns a national multicentre prospective survey on patients' opinions about continuous sedation and legalising medical assistance in dying. Determinants associated with favourable and unfavourable opinions were explored.

**METHODS****Design and setting**

We performed a French national multicentre prospective study among patients in 14 palliative care units between 2016 and 2020. Patients were selected without a prior interview with psychologists. The study questionnaire is provided as online supplemental material 1. Potential participants were identified by the palliative care physician. Before starting the questionnaire, investigators (physicians) presented the purpose of the study and the nature of the questions to the patient.

**Population**

Main selection criteria were as follows: suffering from locally advanced or metastatic cancer and requiring palliative care according to the definition set out by the WHO; hospitalised in a palliative care unit or followed by a palliative care team in hospital or at home; consenting to participate in the study and freely providing written informed consent. The only exclusion criterion was being unable to understand the purpose and conditions of the study.

**Data collection**

Sociodemographics were collected. Clinical data were collected using medical records and were confirmed during completion of the questionnaire. These included: type of cancer, number of metastatic sites, Performance status (WHO), history of cancer treatments (chemotherapy, radiation, surgery) and strong opiate use. In addition, the questionnaire recorded pain level,<sup>9</sup> health-related quality of life (EORCT QLQ-C15Pal)<sup>10</sup> family support, belief in God and practice of religion. The last question referred to the participant's opinion about legalising euthanasia, physician-assisted suicide and deep and continuous sedation.

**Statistical analysis**

Categorical variables were described using counts and frequencies and quantitative variables were described using medians and ranges. Using two specific items, the sample was split into two subgroups: (1) favourable or unfavourable opinion about legalising euthanasia and (2) favourable or unfavourable opinion about legalising assisted suicide. Patients' characteristics were compared with the  $\chi^2$  or exact Fisher's exact test for discrete variables and the Rank-Wilcoxon test for continuous variables according to group. Results were expressed as ORs and their 95% CIs. The level of statistical significance was set at  $1-\alpha=0.95$ . Statistical analyses were carried out with the SPSS software V.20.

**RESULTS****Patients**

Of the 410 patients, a total of 331 patients were interviewed, with a refusal rate of 25%. Median age was 66 years (range 21–94), and 51.4% were women (n=170). The main cancer sites were

pulmonary (19.3%; n=64), digestive (20.8%; n=69), head and neck (12.7%; n=42) and gynaecological (17.2%; n=57). WHO status was 0–1 in 25.5% (n=79), 2 in 26.4% (n=84), 3–4 in 48.7% (n=155). A total of 70% (n=228) were treated with morphine, and 86.7% had metastases, with a mean number of metastatic sites of two (range 1–8). The median time from diagnosis to inclusion was 18 months (range 0.4–610). In the curable phase of the disease, patients received surgery 30% (n=101), adjuvant 28% (n=93) or neoadjuvant 8.2% (n=27) chemotherapy or radiotherapy (27%; n=90). In the incurable phase, 71% (n=235) had already received chemotherapy, 32% (n=106) radiotherapy, 15.7% (n=52) immunotherapy, 9.7% (n=32) targeted therapy and 3% (n=10) hormonal therapy. Patients had received a mean of 2.75 (range 1–12) prior systemic treatments. Fifty-seven per cent were living in a couple (n=187), 82.7% (n=277) had children and 56.7% (n=168) were visited daily during their hospital stay. Fifty-one per cent (n=167) of them had finished high school education. 52.9% (n=175) believed in God and 13.9% (n=46) practised their religion. Finally, 85% (n=301) of patients declared that participating in the survey did not upset them. All the details are provided in [table 1](#).

#### Opinion about legalising deep and continuous sedation

Among included patients, 89.7% (n=297) of patients had a favourable opinion about legalising deep and continuous sedation in the event of intractable suffering, 65.6% (n=217) had a favourable opinion about legalising deep and continuous sedation in the event of psychological suffering without physical suffering and 82.2% (274) had a favourable opinion about legalising deep and continuous sedation at the patient's request, when he/she has decided to discontinue life-sustaining treatment. Seventy-three per cent (244) had a favourable opinion about legalising deep and continuous sedation in situations to allow the physician to discontinue life-sustaining treatment if the patient cannot express his/her will.

#### Opinion about legalising physician-assisted suicide

48.6% of participants (N=161) had a favourable opinion about legalising physician-assisted suicide, 27.2% (n=90) an unfavourable opinion and 21.5% (n=80) did not express an opinion (neither favourable or unfavourable opinion about legalising physician-assisted suicide) (online supplemental material 1, question: page 17).

#### Opinion about legalising euthanasia

Regarding euthanasia, 52% (n=172) of patients were in favour of its legalisation and 22% (n=73) did not express an opinion (neither favourable or unfavourable opinion about legalising euthanasia). Moreover, if

such a law were voted, 42% of patients declared that they might envisage it for themselves (online supplemental material 1, question: page 17).

#### Determinants of favourable or unfavourable opinion about legalising physician assisted

Univariate analysis showed differences between patients with a favourable opinion about legalising physician-assisted suicide and those without. Patients with an unfavourable opinion of legalisation significantly more often believed in God and practised a religion. No other factors were determinants. All the details are provided in [table 1](#).

#### Determinants of favourable or unfavourable opinion about legalising euthanasia

Univariate analysis also showed that patients with an unfavourable opinion about legalising euthanasia significantly more often believed in God and practised a religion. No other factors were determinants of an opinion about legalising euthanasia. All the details are provided in [table 1](#).

## DISCUSSION

This is the first national prospective multicentre study to include a large number of patients who are directly confronted with end-of-life decisions and affected by advanced conditions, while former studies included healthy participants or carers who were not personally or immediately concerned. Our team previously published the first single-centre study on the feasibility of discussing euthanasia and deep sedation with end-of-life patients<sup>7</sup>. A second single-centre study sought to identify potential determinant factors associated with a favourable or unfavourable opinion about euthanasia in a French population of 78 patients with cancer receiving palliative care. Young patients who do not believe in God and have a history of chemotherapy treatment were more likely to request the discontinuation or restriction of their treatment.<sup>8</sup> In this study, the majority of patients (89.7%) were in favour of legalising proportionate sedation, that is, of a duration and depth appropriate for a so-called refractory symptom, and also in favour (82.2%) of deep and continuous sedation at the patient's request, when he or she has decided to discontinue life-sustaining treatment in accordance with the current law. Therefore, the Claeys-Leonetti law is probably well adapted to the situations encountered by these patients and probably reflects patients' wishes. 73.7% of the patients also agreed that, in the event that a patient is unable to express their wishes and if the doctor withdraws life-sustaining treatment, then the latter shall implement deep and continuous sedation. Furthermore, 65% were also in favour of deep and continuous sedation in the event of psychological suffering without physical symptoms. It is therefore important that palliative care professionals should have the necessary skills to identify and manage psychological distress and that mental health professionals should analyse and assess the reasons for

**Table 1** Individuals with or without a favourable opinion about legalising physician-assisted suicide and euthanasia

	All		Legalising physician-assisted suicide			Legalising euthanasia			P value
	N=331		Favourable	Not favourable	P value	Favourable	Not favourable	P value	
	M±SD	MD	N=161	N=90		N=172	N=86		
	N (%)		M±SD	M±SD	N (%)	M±SD	M±SD	N (%)	
Age	65.8±12.7	13	64.7±12.4	67.9±12.7	0.054	65.5±13.0	66.3±12.5	0.627	
Sex									
Male	161 (48.6)	0	85 (52.8)	44 (48.9)	0.553	86 (50.0)	45 (52.3)	0.725	
Female	170 (51.4)		76 (47.2)	46 (51.1)		86 (50.0)	41 (47.7)		
Marital situation									
Couple	187 (57)	3	96 (60)	44 (48.9)	0.089	97 (56.7)	46 (53.5)	0.622	
Single	141 (43)		64 (40)	46 (51.1)		74 (43.3)	40 (46.5)		
Have children									
Yes	272 (82.7)	2	132 (82)	73 (81.1)	0.863	140 (81.4)	71 (82.6)	0.820	
No	57 (17.3)		29 (18)	17 (18.9)		32 (18.6)	15 (17.4)		
High school education									
No	160 (48.9)	4	73 (45.9)	46 (51.1)	0.430	83 (48.8)	42 (48.8)	0.998	
Yes	167 (51.1)		86 (54.1)	44 (48.9)		87 (51.2)	44 (51.2)		
Family support (visits)									
Every day	168 (56.2)	32	82 (56.6)	54 (64.3)	0.699	84 (55.3)	55 (67.1)	0.214	
Less than every day	103 (34.5)		46 (31.7)	22 (26.2)		50 (32.9)	20 (24.3)		
No visit	28 (9.4)		17 (11.7)	8 (9.9)		18 (11.8)	7 (8.5)		
Believe in God									
Yes	175 (54.0)	7	73 (45.6)	65 (73.0)	<0.0001	77 (45.3)	61 (70.9)	<0.0001	
No	149 (46.0)		87 (54.4)	24 (27.0)		93 (54.7)	25 (29.1)		
Practice religion									
Yes	46 (19.8)	99	16 (15.7)	22 (29.7)	0.025	14 (12.5)	23 (32.4)	0.001	
No	186 (80.2)		86 (84.3)	52 (70.3)		98 (87.5)	48 (67.6)		
Hospitalised patient									
Yes	278 (84.8)	3	135 (84.9)	75 (84.3)	0.894	146 (85.9)	73 (84.9)	0.830	
No	50 (15.2)		24 (15.1)	14 (15.7)		24 (14.1)	13 (15.1)		
Cancer site									
Digestive	69 (20.8)	3	32 (19.9)	19 (21.1)	0.267	32 (18.6)	20 (23.3)	0.396	
Gynaecologic	57 (17.2)		26 (16.1)	15 (16.7)		27 (15.7)	14 (16.3)		
Head and neck	42 (12.7)		28 (17.4)	7 (7.8)		29 (16.9)	7 (8.1)		
Lung	64 (19.3)		30 (18.5)	23 (25.6)		36 (20.9)	18 (20.9)		

Continued

Table 1 Continued

	All	Legalising physician-assisted suicide			Legalising euthanasia		
		Favourable	Not favourable	P value	Favourable	Not favourable	P value
Others*	96 (30.3)	45 (28.0)	26 (28.9)		47 (27.5)	27 (31.4)	
Metastatic sites							
Yes	274 (86.7)	15	73 (83.0)	0.448	140 (84.3)	77 (91.7)	0.106
No	42 (13.3)	21 (13.5)	15 (17.0)		26 (15.7)	7 (8.3)	
Treatment during curable phase							
Adjuvant chemotherapy	93 (28.1)	0	26 (28.9)	0.878	48 (27.9)	25 (29.1)	0.845
Neoadjuvant chemotherapy	27 (8.2)	0	6 (6.7)	0.569	15 (8.7)	7 (8.1)	0.875
Radiotherapy	90 (27.2)	0	28 (31.1)	0.337	47 (27.3)	24 (27.9)	0.921
Surgery	101 (30.5)	0	29 (32.2)	0.990	55 (32)	27 (31.4)	0.925
Immunotherapy	14 (4.2)	0	4 (4.4)	1.000	9 (5.2)	4 (4.7)	0.841
Target therapy	12 (3.6)	0	4 (4.4)		7 (4.1)	4 (4.7)	0.828
Treatments during incurable phase							
Chemotherapy	235 (71.0)	0	65 (72.2)	0.812	122 (70.9)	62 (72.1)	0.840
Radiotherapy	106 (32.0)	0	25 (27.8)	0.519	52 (30.2)	29 (33.7)	0.569
Surgery	58 (17.5)	0	12 (13.3)	0.733	23 (13.4)	15 (17.4)	0.385
Immunotherapy	52 (15.7)	0	12 (13.3)	0.281	31 (18)	12 (14)	0.408
Target therapy	32 (9.7)	0	6 (6.7)	0.305	15 (8.7)	7 (8.1)	0.875
Hormonotherapy	10 (3.0)	0	1 (1.1)	0.427	4 (2.3)	2 (2.3)	1.000

\*Dermatologic, haematologic, cerebral, sarcoma, urologic.  
MD, missing data.

psychological and/or existential distress and fully investigate whether a patient's request truly reflects their wishes.<sup>11</sup> While 96% of healthy French people are in favour of legalising euthanasia, only half of palliative care patients are (IFOP-Le regard des Français sur la fin de vie. 2014). Medical palliative care specialists are largely opposed to euthanasia, while patients are more divided on the issue.<sup>6</sup> Patients must, therefore, be listened to attentively.

In multivariate analysis on a cohort of US patients, Suarez-Almazor *et al* showed that the only characteristics that remained statistically associated with support for euthanasia were religious beliefs and the perception that patients with cancer are a heavy burden on their families.<sup>12</sup> A Canadian team also showed that the desire for hastened death was associated with lower religiosity, reduced functional status, a diagnosis of major depression and greater distress of individual symptoms and concerns.<sup>13</sup> In another work, Italian patients who were in favour of euthanasia had a higher Karnofsky score. No other variables taken into consideration provided any relationship but only 25 patients (40%) were in favour with euthanasia in that study.<sup>14</sup> A systematic review of older adults' requests for or attitude towards euthanasia or assisted suicide showed that younger age, lower religiosity, higher education and higher socioeconomic status were the most consistent predictors of endorsement of euthanasia and assisted suicide.<sup>15</sup> Finally, a New Zealand study analysing factors associated with terminally ill people who wanted to die showed that the factors with the largest ORs were awareness of terminal prognosis, high level of depression, not finding meaning in day-to-day life and pain.<sup>16</sup>

As mentioned above, we identified the potential determining factors associated with a favourable or unfavourable opinion about euthanasia as age, belief in God and a medical history of chemotherapy.<sup>8</sup> In that study, only belief in God was a determining factor of holding an opinion against legalising euthanasia and assisted suicide. Therefore, the only determining factor identified in our study is a cultural factor that is independent of the other studied variables such as pain, anxiety, site of disease, treatments received, general health status, level of education and duration of disease. This common factor was found in other studies conducted on cohorts from different countries.<sup>12 13 15</sup> Additionally, the independent effect of religiosity on the opinion about hastened death has been extensively discussed in the general population.<sup>17 18</sup> Interestingly, a Danish study examined whether the religious and spiritual characteristics of Danish physicians were associated with their attitudes toward end-of-life decisions, including euthanasia. It was shown that being more religious was associated with being more likely to oppose euthanasia.<sup>19</sup> Religions may regard understanding death and dying as vital to finding meaning in human life.<sup>20</sup> Unsurprisingly, all faiths hold strong views on euthanasia and believers are more reluctant to endorse it. Nevertheless, 'believing in God' is a rather simplistic way of exploring religiosity and it does not fully define what being religious entails. In France, a survey in 2021 showed

that 49% of French people declared believing in God as opposed to 66% in 1947 (IFOP, Le rapport des Français à la religion, August 2021).

The study had some limitations. First, the representativeness of the sample is questionable since the opinion of end-of-life patients may vary according to the pathology they are suffering from and as their health status worsens. For example, we can hypothesise that being in a condition of incurable cancer should be differently experienced in comparison with suffering of amyotrophic lateral sclerosis, due to the course disease and the profile of the patients. Patients managed in non-palliative care units may also hold opinions different from those of patients managed in palliative settings. Future studies should focus on patients with other end-of-life conditions. Second, one-third of the eligible patients refused to participate, possibly because they were more cognitively or physically impaired. If so, this factor would affect the participation rate. Third, we chose to provide an introductory section including the sentences as they were written in the official French decree for more objectivity. So the questions differed from those obtained in the opinion polls, which may bias the comparison of results.

## CONCLUSION

This study contributes to the knowledge and thinking about the impact of patients' beliefs in God, euthanasia and assisted suicide. Future qualitative research could continue to explore the relationship between an individual's belief in God and their views on euthanasia. The context of the illness and the patient's social situation probably do not influence their opinions on these issues. A better understanding of patients' beliefs is essential for providing precise information and/or interventions tailored to the palliative context. This poses questions about our current ability to care for and accompany patients through this most difficult of life stages. Medical advances, which have transformed diseases that once led to a rapidly fatal outcome, coupled with increased life expectancy and other social phenomena linked to human development, make it likely that these situations will become more common.<sup>21</sup> The present findings could be taken into account by deciders and lawmakers in France and elsewhere to satisfy the wishes of patients and to provide guidance for caregivers.

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#### REFERENCES

- Ferrand E, Rondeau E, Lemaire F, *et al.* Requests for Euthanasia and palliative care in France. *Lancet* 2011;377:467–8.
- Roehr B. Assisted dying around the world. *BMJ* 2021;374:2200.
- Mroz S, Dierickx S, Deliens L, *et al.* Assisted dying around the world: a status quaestionis. *Ann Palliat Med* 2021;10:3540–53.
- Emanuel EJ, Onwuteaka-Philipsen BD, Urwin JW, *et al.* Attitudes and practices of Euthanasia and physician-assisted suicide in the United States, Canada, and Europe. *JAMA* 2016;316:79–90.
- de Nonneville A, Marin A, Chabal T, *et al.* End-of-life practices in France under the Claeys-Leonetti law: report of three cases in the oncology unit. *Case Rep Oncol* 2016;9:650–4.
- Dany L, Baumstarck K, Dudoit E, *et al.* Determinants of favourable opinions about Euthanasia in a sample of French physicians. *BMC Palliat Care* 2015;14:59.
- Boulanger A, Chabal T, Fichaux M, *et al.* Opinions about the new law on end-of-life issues in a sample of French patients receiving palliative care. *BMC Palliat Care* 2017;16:7.
- de Nonneville A, Chabal T, Marin A, *et al.* Determinants of favorable or unfavorable opinion about Euthanasia in a sample of French cancer patients receiving palliative care. *BMC Palliat Care* 2018;17:104.
- Price DD, McGrath PA, Rafii A, *et al.* The validation of visual analogue scales as ratio scale measures for chronic and experimental pain. *Pain* 1983;17:45–56.
- Groenvold M, Petersen MA, Aaronson NK, *et al.* The development of the EORTC QLQ-C15-PAL: a shortened questionnaire for cancer patients in palliative care. *Eur J Cancer* 2006;42:55–64.
- Reich M, Bondenet X, Rambaud L, *et al.* Refractory psycho-existential distress and continuous deep sedation until death in palliative care: the French perspective. *Palliat Support Care* 2020;18:486–94.
- Suarez-Almazor ME, Newman C, Hanson J, *et al.* Attitudes of terminally ill cancer patients about Euthanasia and assisted suicide: predominance of psychosocial determinants and beliefs over symptom distress and subsequent survival. *J Clin Oncol* 2002;20:2134–41.
- Wilson KG, Chochinov HM, McPherson CJ, *et al.* Desire for Euthanasia or physician-assisted suicide in palliative cancer care. *Health Psychol* 2007;26:314–23.
- Mercadante S, Costanzi A, Marchetti P, *et al.* Attitudes among patients with advanced cancer toward Euthanasia and living wills. *J Pain Symptom Manage* 2016;51:e3–6.
- Castelli Dransart DA, Lapiere S, Erlangsen A, *et al.* A systematic review of older adults' request for or attitude toward Euthanasia or assisted-suicide. *Aging Ment Health* 2021;25:420–30.
- Cheung G, Martinez-Ruiz A, Knell R, *et al.* Factors associated with terminally ill people who want to die. *J Pain Symptom Manage* 2020;60:539–48.
- Caddell DP, Newton RR. Euthanasia: American attitudes toward the physician's role. *Soc Sci Med* 1995;40:1671–81.
- MacDonald WL. Situational factors and attitudes toward voluntary Euthanasia. *Soc Sci Med* 1998;46:73–81.
- Balslev van Randwijk C, Opsahl T, Assing Hvidt E, *et al.* Association between Danish physicians' religiosity and spirituality and their attitudes toward end-of-life procedures. *J Relig Health* 2020;59:2654–63.
- Krok D. The role of meaning in life within the relations of religious coping and psychological well-being. *J Relig Health* 2015;54:2292–308.
- Monforte-Royo C, Villavicencio-Chávez C, Tomás-Sábado J, *et al.* The wish to hasten death: a review of clinical studies. *Psychooncology* 2011;20:795–804.