

Legalisation of euthanasia or physician-assisted suicide: survey of doctors' attitudes

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This study reports UK doctors' opinions about legalisation of medically assisted dying (euthanasia and physician-assisted suicide), comparing this with the UK general public. A postal survey of 3733 UK medical practitioners was done. The majority of UK doctors are opposed to legalisation, contrasting with the UK general public. Palliative medicine specialists are particularly opposed. A strong religious belief is independently associated with opposition to assisted dying. Frequency of treating patients who die is not independently associated with attitudes. Many doctors supporting legalisation also express reservations and advocate safeguards; many doctors opposing legalisation believe and accept that treatment and nontreatment decisions may shorten life. It is hoped that future debates about legalisation can proceed with this evidence in mind. *Palliative Medicine* (2009); **00**: 1–8

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Introduction

The attitudes of UK doctors towards legalisation of assisted dying are not well understood. A 2005 review¹ concluded that support for legalisation has varied between 22 and 66% since 1987, with differences in question wording contributing to variability, but in general showing most doctors are opposed to permissive legislation, with geriatricians more opposed than others and general practitioners (GPs) less opposed than those in hospital specialties. No surveys of palliative medicine specialists were identified in the 2005 review, but one provided as evidence to a Lords select committee in 2003² found 90% of palliative medicine doctors to be opposed to legalisation. The 2005 review suggested that greater experience of end-of-life care may be related to greater opposition to legalisation.

The variety of question wording in surveys of UK doctors' views is exemplified by a comparison of two regional studies of GPs which delivered differing results. In 1994, Ward and Tate³ found 48% agreed that UK law on euthanasia ought to be the same as that in the Netherlands (the legal position being explained at length in the notes accompanying the question). Pasterfield, *et al.*,⁴ however, in 2006 found only a quarter of their GP respondents agreed with the statement that 'the law on intentional killing should be changed to allow physician-assisted suicide (or) voluntary euthanasia'. Clearly variations in wording may have been responsible for the difference.

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By contrast, surveys of the UK general public have delivered more consistent and reliable results,¹ albeit using a variety of different question wordings that in some cases can lead respondents to endorse particular views. Most polls find a majority of the general public are in favour of allowing euthanasia, with regular church goers, nonwhites, non-UK nationals, disabled people and those with less formal education being more likely to be opposed. The British Social Attitudes survey^{5,6} has tracked changes since 1984 in public opinion, using the same questions each time, and is perhaps the most reliable source of evidence here with funding not linked to any organisation with a commitment to one side of the euthanasia debate.

Internationally it is well established that public opinion tends to be more favourable towards legalisation than medical opinion. Emanuel's 2002 review of decades of opinion research in the USA⁷ concludes that although about two-thirds of the American public since the 1970s have supported the legalisation of euthanasia or physician-assisted suicide, surveys of physicians over the same period rarely show as much as a half supporting such a move. This review also found doctors to be more able than the general public to distinguish between euthanasia and physician-assisted suicide. Comparative studies of medical and public opinion in Norway,⁸ New Zealand,⁹ the Netherlands,^{10–12} Finland,¹³ Spain¹⁴ and Australia¹⁵ have, similarly, found medical opinion to be less favourable than public opinion. Religious belief is consistently found to be associated with opposition to assisted dying in both doctors^{7,16–22} and the general public.^{5,10,23–28}

Other studies have reported variations between medical specialties. Miccinesi, *et al.*²⁹ found oncologists and geriatricians to be more opposed than other doctors in a survey in six European countries, and Dickinson, *et al.*³⁰ found

UK geriatric medicine physicians to be considerably more opposed than intensive care physicians. Emanuel⁷ found American oncologists less likely to be supportive than other specialties. Grassi, *et al.*¹⁸ found doctors with more experience of caring for people with terminal illness were more opposed. Peretti-Wattel³¹ found French palliative care doctors to be more opposed than GPs and neurologists, and these doctors were also clearer about distinguishing euthanasia from palliative sedation and from the shortening of life through withdrawing or withholding treatment. These studies suggest support for the view that greater experience of end-of-life care results in greater opposition to medically assisted dying.

The lack of clarity about UK medical opinion and how it may compare with public opinion in the United Kingdom has contributed to uncertainty about the stance of the British medical profession when legislation is proposed. This was exemplified by the shifting stance of the British Medical Association, which in 2005 withdrew opposition to the legalisation of assisted dying but in 2006 reinstated it after criticism from members and a further vote. Majority support, or at least neutrality, from the medical profession has been an important factor in enabling the passing of permissive legislation in Oregon, the Netherlands and Belgium. Given periodic attempts to pass similar legislation in Britain, a better understanding of the opinions of UK doctors is therefore long overdue. This article reports a study of UK medical practitioners' attitudes towards legislation to allow euthanasia and assisted suicide, using questions that allow direct comparison with surveys of the UK general public, showing variations according to medical specialty, extent of experience in caring for patients approaching death, religious beliefs and other variables.

Methods

Sampling and questionnaire

Binley's database (<http://www.binleys.com>) of 76,459 UK medical practitioners was used to send questionnaires to 8857 working UK medical practitioners, comprising separate random samples of 2829 GPs (7% of GPs listed by Binleys), 443 neurologists (43% of neurologists listed), 836 specialists in care of the elderly (21% of these doctors), 462 specialists in palliative medicine (54% of these doctors) and 4287 in other hospital specialties (excluding specialties such as public health where doctors do not normally treat people who die, so 15% of these doctors). Two follow-up reminders were sent between November 2007 and April 2008. Data showing results for all doctors are weighted to bring figures for specialty into line with proportions in the medical population, except where otherwise stated.

The questionnaire asked about the age, gender, grade, ethnic origin, religion, specialty of the respondent and the number of deaths, on average, treated or attended by the respondent in either a week, month or year. The question about ethnicity was the same as that used in the UK government decennial census and about religion the same as that used in British Social Attitudes surveys.^{5,6} Note that the question on religion does not ask about faith, which may have been considered by some respondents to be different from religiosity. Those who had attended a death in the past year were asked to report in detail on the care of the last person who had died under their care (see Table 1 for details of the preceding questions). All respondents were asked four questions about attitudes to euthanasia and assisted dying, worded in the same way as those used in British Social Attitudes surveys of public opinion (see Table 2 for wording). The full questionnaire may be obtained on application to the author.

Response rate and response bias

The overall response rate was 42.1%. Specialists in palliative medicine produced the highest response rate (67.3%), then specialists in care of the elderly (48.1%), neurologists (42.9%), other hospital specialties (40.1%) and GPs (39.3%). GP responders were more likely to be women (50% of responding GPs compared with 44% in the national medical workforce). Gender was proportionate for other specialties. Older doctors were more likely to reply. For GPs, this age bias applied to those over 45 and for other doctors to those aged over 35.

Doctors asked to report on the last death they attended by this method tend not to choose a sudden or unexpected death.³² In this survey, responders were more likely to report on a death from cancer (48% of reported deaths) than occur in national mortality statistics (27.6%) and less likely to report on a death from cardiovascular disease (18.9% reported vs 34.7% nationally).

In all, 66 doctors returned letters, notes or e-mails giving reasons for not responding. The most common reason was not having the time to complete the survey (28 doctors), and the second most common (19 doctors) was not being involved in care of dying patients or palliative care (even though the accompanying letter indicated that a response from doctors in this position would be welcomed).

Nonresponders were sent a one-page form asking for their reasons for nonparticipation and some other questions, to which 348 replied. Table 3 shows the proportion agreeing with each of nine reasons for not responding.

Nonresponders were asked the first two questions that appear in Table 2. No significant difference between responders and nonresponders was found for question 1; nonresponders were somewhat more likely to be opposed to allowing a doctor to assist in a death in the manner

Table 1 WebLink: questions about age, gender, specialty, grade, number of deaths treated or attended, religious belief and ethnic origin

Your age	<input type="checkbox"/> Under 35 years of age <input type="checkbox"/> 36 to 45 years of age <input type="checkbox"/> 46 to 55 years of age <input type="checkbox"/> 56 to 65 years of age <input type="checkbox"/> over 65 years of age
Your gender	<input type="checkbox"/> Male <input type="checkbox"/> Female
Your medical specialty	<input type="checkbox"/> General practice <input type="checkbox"/> Palliative medicine <input type="checkbox"/> Neurology <input type="checkbox"/> Elderly care <input type="checkbox"/> Other, please specify
Grading of your post	<input type="checkbox"/> Consultant <input type="checkbox"/> Specialist registrar <input type="checkbox"/> Associate specialist/staff grade <input type="checkbox"/> SHO/HO/F1/F2 <input type="checkbox"/> GP principal <input type="checkbox"/> GP registrar
Please indicate the number of deaths, on average, for which you would be the treating or attendant doctor in the normal course of your duties. Answer <u>only one</u> of (a), (b) or (c) (please give the most accurate estimate you can).	(a) _____ per week (b) _____ per month (c) _____ per year
Religion: would you describe yourself as	<input type="checkbox"/> Extremely religious <input type="checkbox"/> Very religious <input type="checkbox"/> Somewhat religious <input type="checkbox"/> Neither religious nor non-religious <input type="checkbox"/> Somewhat non-religious <input type="checkbox"/> Very non-religious <input type="checkbox"/> Extremely non-religious <input type="checkbox"/> Can't choose
What is your ethnic group? Choose <u>ONE</u> section from A to E, then tick the appropriate box to indicate your ethnic group	A) White <input type="checkbox"/> Any White background B) Mixed <input type="checkbox"/> White and Black Caribbean <input type="checkbox"/> White and Black African <input type="checkbox"/> White and Asian <input type="checkbox"/> Any other Mixed background, <i>please write in</i> C) Asian or Asian British <input type="checkbox"/> Indian <input type="checkbox"/> Pakistani <input type="checkbox"/> Bangladeshi <input type="checkbox"/> Any other Asian background, <i>please write in</i> D) Black or Black British <input type="checkbox"/> Caribbean <input type="checkbox"/> African <input type="checkbox"/> Any other Black background, <i>please write in</i> E) Chinese or other ethnic group <input type="checkbox"/> Chinese <input type="checkbox"/> Any other, <i>please write in</i>

described in question 2 (72% thought probably or definitely not, as opposed to 64% of responders; $P = 0.005$).

In conclusion, it appears that nonresponders tended to be younger and to have inadequate time to complete the questionnaire. The high response rate from palliative medicine specialists and, to a smaller extent, those involved in care of the elderly, coupled with the bias towards reporting on a cancer death and the perception of some respondents

that it was unnecessary to complete the questionnaire if they did not normally attend dying patients, suggests that the survey tended to be perceived as being largely relevant to terminal care. This is consistent with a study by Fischer, *et al.*³³ of nonresponders to a similar survey in four countries which found those with more terminal patients were more likely to respond. It is possible that responders on the present survey were more in favour of legalising assisted

Table 2 Medical and public opinion about assisted dying

	BSA ^a %	Doctors ^b %
These questions are about voluntary euthanasia (i.e., when someone ends the life of another person at their request).		
1. First, a person with an incurable and a painful illness, from which they will die - for example, someone dying of cancer. Do you think that, if they ask for it, a doctor should ever be allowed by law to end their life, or not?		
Definitely should be allowed	51.5	8.6
Probably should be allowed	30.3	25.4
Probably should not be allowed	6.2	29.6
Definitely should not be allowed	9.9	34.8
Don't know	1.9	—
Not answered	0.3	1.6
Total (=100%)	2111	3733
2. And do you think that, if this person asks for it, a doctor should ever be allowed by law to give them lethal medication that will allow the person to take their own life?		
Definitely should be allowed	30.8	7.7
Probably should be allowed	30.8	27.5
Probably should not be allowed	13.5	27.1
Definitely should not be allowed	22.3	35.1
Don't know	2.4	—
Not answered	0.3	2.6
Total (=100%)	2111	3733
3. Now, how about a person with an incurable and painful illness, from which they will not die. Do you think that, if they ask for it, a doctor should ever be allowed by law to end their life, or not?		
Definitely should be allowed	17.7	3.5
Probably should be allowed	28.1	15.0
Probably should not be allowed	20.9	31.5
Definitely should not be allowed	29.5	48.4
Don't know	3.2	—
Not answered	0.5	1.6
Total (=100%)	1079	3733
4. And do you think that, if this person asks for it, a doctor should ever be allowed by law to give them lethal medication that will allow the person to take their own life?		
Definitely should be allowed	16.6	4.0
Probably should be allowed	24.7	17.7
Probably should not be allowed	21.0	29.9
Definitely should not be allowed	34.7	46.5
Don't know	2.5	—
Not answered	0.4	1.9
Total (=100%)	1080	3733

^aBSA, British Social Attitudes.⁵

^bWeighted to adjust for distribution of specialties in medical population.

dying than nonresponders, but the evidence for this is weak. Fischer, *et al.* found that nonresponders were more undecided than responders on this issue but with no consistent bias for or against assisted dying.

Results

Table 2 compares medical with public opinion, showing lower levels of support by doctors for all categories of assisted dying when compared with the general public. Table 4 shows that opposition is particularly strong amongst palliative medicine doctors and somewhat strong amongst care of elderly specialists.

Table 3 Reasons for not responding

	% Agreeing
I don't have time to respond to questionnaires	55.9
The original questionnaire was too long	53.0
I am not involved in the care of dying people	15.7
The wording of the original questionnaire was biased	6.7
I did not trust the assurances of confidentiality	5.8
I never respond to questionnaires	5.5
I did not receive the original questionnaire	2.3
I don't agree with doing research on this subject	1.7
I only reply to questionnaires if offered a fee	0.9
Total = (100%)	348

Answers to the four questions about assisted dying were added and then divided by four to create a new variable *ADatt* (Assisted Dying attitudes) ranging from 1 (high support for assisted dying) to 4 (low support for assisted dying). Table 5a shows the distribution of this variable across specialties, indicating the lowest support amongst palliative medicine specialists. Table 5b shows its correlations with other variables, giving significance levels. Doctors who are older, male or 'White' (as opposed to 13 other categories, as listed in the UK decennial census) are more likely to support assisted dying in correlations that are very small though statistically significant. Similarly small but statistically significant, caring for a higher number of people who die in a year, being a specialist in elderly care and being a palliative medicine specialist are associated with opposition to the legalisation of assisted dying. Greater religiosity shows the strongest association with opposition.

Table 5c shows that palliative medicine doctors see significantly more deaths per year than other doctors and are more likely to be female, white, religious and younger, though these last two variables are particularly weak correlations.

To test the independence of their relationship with *ADatt*, partial correlations were produced with the three variables shown in Table 5d. This shows that religiosity maintains its association with opposition to assisted dying when the other variables are controlled, and being a palliative medicine doctor also retains a weak but statistically significant independent association. But greater experience in caring for people who die is not independently associated with views about assisted dying, this weak association in the bivariate analysis reported in Table 5b probably being because palliative medicine specialists care for large numbers of people who die.

Analysis of qualitative comments

A total of 176 doctors wrote qualitative comments about a policy of allowing medically assisted dying, of which 31% (30% when weighted by specialty) were favourable to such a policy, 36% (37%) opposed and 33% (33%) neutral.

Table 4 Medical opinion about assisted dying, by speciality

	Palliative %	Elderly %	Neurology %	GP %	Other %
1. First, a person with an incurable and a painful illness, from which they will die - for example, someone dying of cancer. Do you think that, if they ask for it, a doctor should ever be allowed by law to end their life or not?					
Definitely should be allowed	2.6	6.8	8.6	8.5	9.6
Probably should be allowed	6.5	21.4	23.0	23.7	29.7
Probably should not be allowed	17.5	24.9	29.9	32.3	28.5
Definitely should not be allowed	73.4	46.9	38.5	36.5	32.2
Total (N = 100%)	308	397	187	1093	1692
2. And do you think that, if this person asks for it, a doctor should ever be allowed by law to give them lethal medication that will allow the person to take their own life?					
Definitely should be allowed	2.3	6.0	8.8	7.5	8.8
Probably should be allowed	11.4	21.2	25.3	27.7	30.7
Probably should not be allowed	23.1	25.2	29.7	29.8	25.8
Definitely should not be allowed	63.2	47.6	36.3	35.1	34.7
Total (N = 100%)	307	397	182	1084	1670
3. Now, how about a person with an incurable and a painful illness, from which they will not die. Do you think that, if they ask for it, a doctor should ever be allowed by law to end their life, or not?					
Definitely should be allowed	2.3	3.8	2.2	3.3	3.9
Probably should be allowed	3.6	8.8	9.7	14.9	17.2
Probably should not be allowed	12.3	27.8	34.9	33.2	31.7
Definitely should not be allowed	81.8	59.6	53.2	48.6	47.2
Total (N = 100%)	308	396	186	1097	1687
4. And do you think that, if this person asks for it, a doctor should ever be allowed by law to give them lethal medication that will allow the person to take their own life?					
Definitely should be allowed	2.3	3.5	3.8	4.2	4.2
Probably should be allowed	6.2	10.6	12.4	18.4	19.3
Probably should not be allowed	18.9	27.2	34.6	31.9	29.4
Definitely should not be allowed	72.6	58.7	49.2	45.5	47.2
Total (N = 100%)	307	397	185	1094	1677

Palliative, palliative medicine; Elderly, care of elderly; Neurology, neurology; GP, general practitioner; Other, other hospital specialities.

Of those in favour, 27% (29%) were in favour without any qualifying statements or reservations (Box 1a). The most common qualifying statement concerned the need for safeguards to prevent abuse, made by 45% (46%) of those in favour of assisted dying (Box 1b). Others in favour of assisted dying made comments about the need for nonmedical people to carry out euthanasia or assisted suicide or for individual doctors to have a right to opt out [27% (25% weighted) Box 1c].

Of those opposed to assisted dying, 61% (51% weighted) stated their opposition without qualification (Box 2a). A further 35% (36%) stated their opposition but indicated that withdrawing or withholding treatment that might sustain life in the interests of relieving suffering, or providing treatment that might also shorten life, was acceptable (Box 2b). Another 25% (19%) of those opposed to assisted dying recommended palliative care as an alternative (Box 2c). A further 14% (6%) of those opposed were concerned about the involvement of doctors in such activities (Box 2d).

Discussion

This study shows that the majority British doctors do not support legalising assisted dying, either in the form of euthanasia or physician-assisted dying. In this, they differ

from equivalent surveys of the general population. This is consistent with findings from other countries where medical and public attitudes have been compared. Opposition is particularly strong amongst palliative medicine specialists and, to a lesser extent, amongst specialists in care of the elderly, in both of which specialties doctors have more experience of caring for people who die. Although this provides some support for the view that experience of terminal care is associated with opposition to assisted dying, multivariate analysis in which specialty and religiosity is controlled for suggests that having more experience is not independently associated with attitudes towards legalisation. Strength of religiosity shows an independent association with attitudes, confirming findings from international studies of both public and medical opinion. Note, however, that religiosity is a limited concept and may not identify some respondents who felt they had faith but did not engage in religious behaviour, such as attendance at religious service.

The qualitative analysis suggests that those in favour of assisted dying frequently qualify their support by stressing the need for safeguards and for adequate palliative care provision and expressing concern about medical involvement, to the extent that some argued for a specialisation in assisted dying that might not involve doctors. Those against it often believed and found acceptable that treatments, or nontreatment decisions, might shorten life.

Table 5 Variables associated with support or opposition to assisted dying (*ADatt*)

a. Distribution of <i>ADatt</i> by specialty ^a				
	Mean	N	SD	95% CI
General practice	3.09	1073	0.82	3.04–3.14
Palliative medicine	3.61	307	0.66	3.54–3.68
Neurology	3.17	181	0.78	3.06–3.29
Elderly care	3.28	395	0.79	3.20–3.36
Other hospital	3.03	1661	0.84	3.00–3.07
All	3.13	3617	0.83	3.10–3.16
b. Bivariate correlations of <i>ADatt</i> with other variables				
	Weighted by specialty	Unweighted		
Support assisted dying				
Older age	0.04*	0.04**		
Male gender	0.04*	0.07**		
White	0.08**	0.05**		
Oppose assisted dying				
More annual deaths	0.04*	0.12**		
Elderly care specialism	0.06**	0.06**		
Palliative medicine specialism	0.08**	0.18**		
Greater religiosity	0.30**	0.29**		
c. Bivariate correlations with being a palliative medicine doctor				
More annual deaths	—	0.63**		
Female gender	—	0.21**		
White	—	0.11**		
Greater religiosity	—	0.06**		
Younger age	—	0.05**		
d. Partial correlations of three variables with <i>ADatt</i> ^b				
Greater religiosity	0.30**	0.29**		
More annual deaths	0.01	0.02		
Palliative medicine specialism	0.06**	0.12**		

* $P < 0.05$ ** $P < 0.01$ ^aANOVA: Between groups F test $P < 0.0001$ ^bEach partial correlation shows the correlation between that variable and *ADatt*, controlling for the other two variables.**Box 1** Qualitative comments of those in favour of legalisation*1a. In favour, without qualification*

I consider that in some cases, assistance in managing a dying patient could appropriately include euthanasia; prolonging a slow, painful dying process is less human than providing a more rapid and comfortable end to life for a patient, relatives and staff. E0218

1b. In favour, safeguards needed

Only if such decisions are properly governed and involve two separate professional assessments, following clear legal guidance. B0095

1c. In favour, but not involving us

I am in favour of legislating for voluntary euthanasia, but would wish this to be distinct from general medical and GP services. B0312

If the law and patient choice dictates euthanasia I have no real objection but it should be conducted by professionals other than doctors as it may blur perceptions of doctors' role, leave vulnerable people reluctant to seek medical help for symptom control. C0106

This relatively large data set makes analysis of sub-groups feasible, and the use of questions wording derived from studies of the general public allows for direct comparability with public opinion. The response rate from palliative medicine specialists was good. But the response rate otherwise raises the issue that the results may not be representative. For this reason, the nature of nonresponse has been examined carefully for any suggestions of response bias. The survey appears to have been responded to more by older doctors and by doctors who thought replying was only relevant if they were involved in terminal care. Lack of time to respond to questionnaires was the most frequently cited reason for nonresponse. There is weak evidence from the investigation of nonresponders to suggest that doctors supporting physician-assisted suicide may have been more likely to respond, but this is not true of euthanasia. The only other study of nonresponders to a similar survey³³ done in four European countries found no consistent bias for or against assisted dying.

Periodically attempts are made to change the law on assisted dying in the United Kingdom. It is hoped that the results of this survey will provide a baseline for studies of medical opinion over time and better inform both proponents and opponents about the state of UK medical opinion in future debates.

Box 2 Qualitative comments of those opposed to legalisation*2a. Opposed without qualification*

In my opinion, euthanasia is never justified. B0424

As a doctor my duties are to promote life and well-being including pain relief and facing death/pain. I did not enter this profession to assist those who choose suicide to carry it out. B0926

To allow this is to remove the keystone of moral and civil society. D0109

Ultimately God alone has the right to decide whether to give or take life. E1085

2b. Opposed, but treatment or nontreatment may shorten life

My own feeling is that patients that are terminal should be kept comfortable as possible. Neither patients nor doctors should have the authority ever to intentionally hasten the end of life. However, if this occurs as a price for providing comfort to the patient, then it's acceptable. B0039

I would...be at ease with using a narcotic to ease respiratory distress or pain even though it may contribute to cessation of life. I would not be associated with euthanasia and if it was compulsory would be a conscientious objector, and resign if necessary. E0177

2c. Opposed; palliative care is an alternative

The present system of palliative care if properly funded and accessed should avoid many of the issues without a very difficult change of law with all its strong disadvantages. C0058

I do not believe doctors should be drawn into physician-assisted suicide/euthanasia... We need better access to palliative care, especially for patients with non-cancer diagnoses and people in residential care. D0031

2d. Opposed; don't involve doctors

I do not think euthanasia is actively a doctor's role. It is not technically difficult and if society wants this I do not see that a separate 'profession' couldn't be set up (perhaps providing employment for philosophy graduates?) so as to keep doctoring free of the express role of euthanasia. C0045

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Ethical approval

Ethical approval for this study was granted by the South East Research Ethics Committee REC 07/H1102/94.

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