END OF LIFE

Surveys on attitudes towards legalisation of euthanasia: importance of question phrasing

J Hagelin, T Nilstun, J Hau, H-E Carlsson

J Med Ethics 2004;30:521–523. doi: 10.1136/jme.2002.002543

See end of article for authors' affiliations

Correspondence to:
Dr J Hagelin, Synsalsvagen
10, SE 757 57 Uppsala,
Sweden; jh14@hotmail.
com

Received
15 November 2002
In revised form
20 February 2003
Accepted for publication
17 March 2003

Aim: To explore whether the phrasing of the questions and the response alternatives would influence the answers to questions about legalisation of euthanasia.

Methods: Results were compared from two different surveys in populations with similar characteristics. The alternatives "positive", "negative", and "don't know" (first questionnaire) were replaced with an explanatory text, "no legal sanction", four types of legal sanctions, and no possibility to answer "don't know" (second questionnaire). Four undergraduate student groups (engineering, law, medicine, and nursing) answered.

Results: In the first questionnaire (n=684) 43% accepted euthanasia (range 28–50%), 14% (8–33%) did not, and 43% (39–59%) answered "don't know". Two per cent of the respondents declined to answer. In comparison with previous surveys on attitudes to euthanasia the proportion of "don't know" was large. The results of the second questionnaire (n=639), showed that 38% favoured "no legal prosecution" (26–50%). However, 62% (50–74%) opted for different kinds of legal sanctions, and two of four groups expressed significantly different views in the two surveys. A proportion of 10% declined to answer the second questionnaire.

Conclusion: An introduction of an explanatory text and a wider range of response alternatives produced differences between the results of the two surveys conducted.

Active euthanasia remains a controversial issue both among healthcare professionals and the general public. The fact that people have different opinions is one obvious reason for this; however, different surveys conducted on similar populations also give confusingly different results.¹ There are several possible explanations to this. One is that the term "euthanasia" was not defined,² or when it was defined, different conceptions were used or presupposed.^{3–4} In addition, respondents in different countries or regions have different religious or cultural backgrounds influencing their moral views.^{5–7} People may also change their view over time.⁸

There is, however, one complementary explanation. Survey results may be influenced by the way in which the questions about euthanasia and the possible answers are phrased.⁹ A classical study by Sullivan and colleagues showed that two questions with essentially the same cues could trigger different respondent inclinations and attitudes, producing sometimes remarkably different answers.¹⁰

As a matter of fact, empirical survey data often have been and will be used as a basis for normative discussions. With reference to such discourse one may question two assumptions. The first assumes that the results from surveys support normative conclusions. This has been taken for granted in two articles by Waller¹¹ and Kenis.¹² Both authors use the results from surveys on attitudes to justify the legalisation of active euthanasia. Such arguments, using empirical results as arguments for political decisions may result in these not being supported by the majority of the population, often require controversial value premises.^{1–13} The second assumes that the data on attitudes to legalisation of euthanasia are trustworthy. This latter assumption on the survey instruments has, as far as we know, not been studied.

The aim of the present paper was to explore whether the phrasing of the questions and the response scales would influence the answers to questions about legalisation of euthanasia by comparing results from two different surveys.

METHODS

The target group was undergraduate students at Uppsala University. Questionnaires, in Swedish, were distributed towards the end of lectures and were voluntarily and anonymously completed immediately after distribution. We arranged distribution at times when as many students as possible were present. A similar procedure was performed when collecting the questionnaires from every group.

All students present at the times of distribution of the surveys returned the questionnaires. Of all enrolled students more than 90% responded. Internal response rate varied slightly. Demographic characteristics of all the respondents are given in table 1. Respondents were students of years 1 and 3 from four educational programmes.

The first questionnaire contained 37 questions,¹⁴ of which only one addressed euthanasia (see box 1). No explanation of the term "euthanasia" was given. Forms were distributed in the period 1998–2000. In total, 684 out of 697 individuals (98.1%) responded to the question (360 females and 324 males).

The second questionnaire contained four questions, of which one addressed euthanasia, and it was phrased differently from the first questionnaire. A text was presented in which the term "euthanasia" was defined (see box 2). This questionnaire was distributed in the spring of 2001. In total, 639 out of 711 individuals (89.9%) responded (396 females and 243 males). Respondents were in corresponding years and programmes as those subjected to the first questionnaire. The likelihood ratio χ^2 test was used to measure differences between groups. p Values <0.05 were considered significant. Calculations were done using the SPSS version 10.0 for Windows (SPSS Inc, Chicago, IL, USA).

RESULTS

In the first questionnaire, 43% answered "positive", 14% answered "negative", and 43% did not express an opinion on euthanasia. In general, the younger the students were the

Table 1 Students in years one and three of education

	First questionnaire (acceptance)				Second questionnaire (legal sanction)			
	n	Did not reply	Female (%)	Mean age in years (SD)	n	Did not reply	Female (%)	Mean age in years (SD)
Subject								
Engineering	214	4	29.5	21.8 (3.2)	167	10	41.2	21.9 (2.5)
Law	265	5	56.2	22.8 (5.2)	261	33	59.2	22.8 (3.7)
Medicine	67	2	52.9	25.0 (5.3)	67	17	66.7	24.6 (5.5)
Nursing	138	2	85.9	26.2 (6.5)	144	12	78.8	27.1 (6.4)

more likely they were to accept euthanasia ($p < 0.001$). Students in year 1 were more likely to accept euthanasia than students in year 3 ($p < 0.001$). Compared with the other two programmes, nursing students and medical students had the lowest approval rates of euthanasia ($p < 0.001$) (table 2).

Comparing the first and the second questionnaire, a similar proportion of all the students were positive about euthanasia ($p < 0.058$). The proportion of positive respondents were significantly different for two of the four programmes' responses in the two questionnaires (engineering, $p < 0.881$; law, $p < 0.001$; medicine, $p < 0.127$; nursing, $p < 0.012$). In the second questionnaire we replaced the alternatives "negative" and "don't know" (first questionnaire) with four types of penalty of law and with forced choice—that is, no option to answer "don't know". The most favoured legal consequences were "charges dropped" (32%) and "remission of sentence" (18%). A higher proportion of respondents declined to answer the second questionnaire compared with the first questionnaire (10% v 2%).

The second questionnaire showed no difference in opinion on legalisation of euthanasia according to sex, age, and year of study. A lower proportion of law students approved of the "no legal prosecution" alternative compared with students from the other programmes ($p < 0.001$).

DISCUSSION

Forty three per cent of the respondents did not express an opinion about euthanasia in the first questionnaire. There may be at least two reasons for this. Some may not have given the issue much thought before being questioned. Others may have had an opinion but found that the response alternatives did not allow them to express their views. In the second questionnaire the students were given an explanatory text, a wider range of response alternatives, and no explicit "don't know" alternative. The present results suggested that many of the respondents who answered "don't know" in the first questionnaire would be replaced by respondents who could express an opinion in the second. Perhaps as a consequence of this, a higher proportion of respondents also declined to respond to the second questionnaire compared with the first. However, this group was much smaller (10%) than those who opted for "don't know" in the first questionnaire (43%). A similar effect of the "don't know" exclusion has been shown previously on issues not related to active euthanasia.^{15 16} There were no differences in proportion

of acceptance among engineering students between the two surveys (table 2). This may be because of the fact that, unlike the other three groups, they do not have any professional interest in the question. Law students who in the first questionnaire were quite positive, were in the second questionnaire given the possibility of using the legal system. Almost three out of four students in the second sample opted for such intervention. The present results further suggested that neither medical nor nursing students support intervention by the legal system and perhaps found this an issue for themselves to decide upon.

In the present study a higher proportion of the medical students accepted legalisation of euthanasia compared with a pilot study by Nilstun.¹⁷ There may be several explanations—for instance, in the pilot study the students were informed that current legislation in Sweden treats active, voluntary euthanasia as manslaughter, whereas in the present questionnaire no such information was given.

There is an extensive literature on how to construct questionnaires, and effects related to the instruments and the respondents have been discussed for many years.¹⁸ Whether or not to offer a "don't know" option is one

Box 2: Questionnaire 2

Definition: Active euthanasia is here defined as when a physician purposely ends the life of a terminally ill patient towards the end of life in order to prevent severe suffering—for example, by giving a combination of anaesthesia and muscle relaxing medium.

Whether euthanasia should be legalised or not is debated in many countries. In the Netherlands no legal charges will be brought forward for active euthanasia under the following criteria: that the physician performing active euthanasia has controlled that the patient

- is mentally competent and requests active euthanasia;
- is informed about his/her state and possible treatments;
- is suffering severely—physically and/or psychically;
- does not accept alternative treatments to limit suffering;
- has seen another independent physician who has concurred that the above circumstances are correct.

How would you legislate?

- No sanction (as with other health care procedures)
- Charges should be dropped after assessment by a public prosecutor
- Remission of sentence after assessment by a court
- Prison corresponding to manslaughter
- Prison corresponding to murder.

Box 1: Questionnaire 1

Are you positive or negative towards euthanasia?

- Positive
- Negative
- Don't know

Table 2 Distribution of responses to the first questionnaire about acceptance of euthanasia and the second questionnaire about reasonable legal sanction when a physician performs euthanasia

	First questionnaire			Second questionnaire					
	Acceptance			Legal sanction	Type of legal sanction				
	Positive	Negative	Don't know	None	Yes	Charges dropped	Remission of sentence	Prison for manslaughter	Prison for murder
Engineering	84 (49.5)	16 (7.5)	92 (43.0)	83 (49.7)	84 (50.3)	62 (37.2)	16 (9.5)	5 (3.0)	1 (0.6)
Law	84 (49.4)	39 (14.7)	95 (35.9)	70 (26.4)	191 (73.6)	89 (34.3)	64 (24.2)	26 (9.9)	12 (5.2)
Medicine	17 (26.8)	23 (34.3)	28 (38.8)	27 (40.3)	40 (59.7)	25 (37.3)	11 (16.4)	2 (3.0)	2 (3.0)
Nursing	28 (28.3)	17 (12.3)	82 (59.4)	62 (43.1)	82 (56.9)	44 (30.6)	26 (18.1)	3 (2.1)	9 (6.2)
Female	138 (38.3)	44 (12.2)	178 (49.5)	143 (36.0)	253 (64.0)	140 (35.6)	71 (18.4)	23 (5.1)	19 (4.8)
Male	156 (48.2)	50 (15.4)	118 (36.4)	99 (41.4)	144 (58.6)	80 (32.7)	46 (18.5)	13 (5.1)	5 (2.3)

All values are shown as number (%).

controversial issue.¹⁹ One problem with not offering “don’t know” is that respondents may opt for a response alternative of a question even though they do not know about the issue involved. Offering “don’t know” may on the other hand discourage some respondents from doing the cognitive work necessary to report the true opinions they do have. Further, it has been suggested that inclusion of “don’t know” options in attitude measures may not enhance data quality but instead preclude measurement of some meaningful opinions.

In the first questionnaire, the students could only answer “positive”, “negative”, or “don’t know” to the question about legalisation of active euthanasia. Almost half of the respondents answered “don’t know”. In the second questionnaire the students were, besides no legal control, given the choice between four different degrees of legal control in a split ballot fashion. The effect of excluding a “don’t know” alternative was similar to previous findings. These five options seem to have made it easier for many students to express their opinion about legalisation of active euthanasia. If this interpretation is correct, the results of the second questionnaire should be more valid than the first.

CONCLUSIONS

We trust that our study illustrates the difficulties of interpreting results from different questionnaires to support or oppose recommendations on the practices of euthanasia.

Our hypothesis was that the outcome of questionnaires might be affected by the survey instrument used. The presents study confirms this hypothesis.

These results further show the difficulties of making direct comparisons of answers to questions with different wording and response alternatives in a population with similar characteristics. Answers to questions on whether to legalise euthanasia may thus be modified by the way in which the questions and possible responses are phrased.

ACKNOWLEDGEMENTS

We sincerely thank participating teachers and students for their kind cooperation. Scholarships from the CF Lundström Foundation and the Helge Axelson Johnson Foundation funded this project.

Authors’ affiliations

J Hagelin, J Hau, H-E Carlsson, Department of Neuroscience, Division of Comparative Medicine, Uppsala University, Uppsala, Sweden
T Nilstun, Department of Medical Ethics, Lund University, Lund, Sweden

REFERENCES

- 1 Nilstun T, Melltorp G, Hermeren G. Surveys on attitudes to active euthanasia and the difficulty of drawing normative conclusions. *Scand J Public Health* 2000;**28**:111–16.
- 2 Beauchamp TL, Davidson AI. The definition of euthanasia. *J Med Philos* 1979;**4**:294–312.
- 3 Ubel PA, Asch DA. Semantic and moral debates about hastening death: a survey of bioethics. *J Clin Ethics* 1997;**8**:242–9.
- 4 Pollard B. Euthanasia in Europe. *Lancet* 2001;**357**:1039.
- 5 Kelleher MJ, Chambers D, Corcoran P, et al. Euthanasia and related practices worldwide. *Crisis* 1998;**19**:109–15.
- 6 Vincent JL. Forgoing life support in western European intensive care units: the results of an ethical questionnaire. *Crit Care Med* 1999;**27**:1626–33.
- 7 Asai A, Ohnisi M, Kariya A, et al. Euthanasia and the family: an analysis of Japanese doctors’ reactions to demands for voluntary euthanasia. *Monash Bioethics Review* 2001;**20**:21–37.
- 8 Wolfe J, Fairclough DL, Clarridge BR, et al. Stability of attitudes regarding physician-assisted suicide and euthanasia among oncology patients, physicians and the general public. *J Clin Oncol* 1999;**17**:1274–9.
- 9 Chochinov HM, Wilson KG. The euthanasia debate: attitudes, practices and psychiatric considerations. *Can J Psychiatry* 1995;**40**:593–602.
- 10 Sullivan JL, Pierson J, Marcus GE. Ideological constraint in the mass public: a methodological critique and some new findings. *Am J Polit Sci* 1978;**22**:233–49.
- 11 Waller S. Trends in public acceptance of euthanasia worldwide. *Euthanasia Rev* 1986;**1**:33–47.
- 12 Kenis Y. L’euthanasie active et les medecins: pratique et opinions. *Bulletin du Conseil National Ordre des Medecins* 1994;**3**:53–61.
- 13 Nilstun T, Sjökvist P. From fact to recommendation: explicit value premises make the conclusion more convincing. *J Intern Med* 2001;**249**:121–5.
- 14 Hagelin J, Carlsson HE, Hau J. Medical students’ view on the use of animals in biomedical research. *Scand J Lab Anim Sci* 1997;**24**:151–60.
- 15 Kalton G, Roberts J, Holt D. The effects of offering a middle response option with opinion questions. *Statistician* 1980;**29**:65–78.
- 16 Presser S, Schuman H. The measurement of a middle position in attitude surveys. *Public Opin Q* 1980;**44**:70–85.
- 17 Nilstun T. An inquiry among medical students. No to legalization of euthanasia, but yes to dropped charges or remission of sentence. *Lakartidningen* 2001;**98**:3417–18 (In Swedish).
- 18 Schuman H, Presser S. *Questions and answers in attitude surveys: Experiments on question form, wording, and context*. Thousand Oaks, CA: Sage Publications, 1996.
- 19 Krosnick JA, Holbrook AL, Berent MK, et al. The impact of “no opinion” response options on data quality—non-attitude reduction or an invitation to satistice? *Public Opin Quart* 2002;**66**:371–403.