



PUBLIC OPINION REGARDING END-OF-LIFE DECISIONS: INFLUENCE OF PROGNOSIS, PRACTICE AND PROCESS

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Abstract—The purpose of this study was to examine the effect of changing key factors in survey questions on public opinion regarding end-of-life decisions. These factors were: (a) patient prognosis (likely vs unlikely to recover from the illness); (b) end-of-life practice (foregoing treatment vs assisted suicide vs euthanasia); and (c) and decision making process (competent patient vs incompetent patient based on living will vs incompetent patient based on family wishes). A representative quota sample of 2019 Canadians 18 years of age or older were surveyed using a 13-item questionnaire with 12 items eliciting attitudes towards end-of-life decisions. The questions were systematically varied according to three key factors: patient prognosis, end-of-life practice and decision making process. One item assessed whether respondents had completed a living will. In the case of a decision to forgo life-sustaining treatment in a competent patient, public approval was 85% if the person was unlikely to recover and 35% if the person was likely to recover. In the case of a competent patient unlikely to recover, public approval was 85% for forgoing life-sustaining treatment, 58% for assisted suicide, and 66% for euthanasia. In the case of forgoing life-sustaining treatment for a patient unlikely to recover, public approval was 85% for a competent patient, 88% for an incompetent patient who had expressed his/her wishes in advance through a living will, and 76% for an incompetent patient based on a family's request. The influence of these key factors was similar in other cases examined. Ten percent of Canadians said they had completed a living will. It was concluded that patient prognosis has a major effect, end-of-life practice a moderate effect, and decision making process a minor effect on public opinion regarding end-of-life decisions.

INTRODUCTION

The legal cases of Nancy Cruzan [1] and Sue Rodriguez [2], legislation such as the Patient Self-Determination Act [3], initiatives to legalize euthanasia in Washington, California and Oregon, [4] the quasi-legal status of euthanasia in the Netherlands [5], and practices of physicians such as Jack Kevorkian [6] and Timothy Quill [7], have riveted world attention on end-of-life decisions. At present, decisions to forego treatment are legal, but assisted suicide and euthanasia are illegal in most jurisdictions. However, the Dutch parliament has passed legislation guaranteeing immunity from prosecution for physicians who practise euthanasia according to prescribed guidelines; these include requirements that the request for euthanasia must be made "entirely of the patient's own free will" and that the "patient must experience his or her suffering as perpetual, unbearable and hopeless" [8]. Moreover, Quill *et al.* have proposed clinical criteria for legalizing physician assisted suicide which would limit the practice to capable patients who have incurable conditions causing severe, unrelenting suffering; these authors argue against the legalization of euthanasia because of the risk of abuse [9]. Recently, Oregon voters passed a legislative initiative that would permit assisted suicide of competent, terminally ill

patients [4]. Although public opinion is generally supportive of end-of-life decisions [10], how various factors proposed in guidelines to legalize assisted suicide and euthanasia influence public opinion is unknown. Therefore, our purpose was to examine the effect of changing key factors in survey questions on public opinion regarding end-of-life decisions. These factors were:

- (a) patient prognosis (likely vs unlikely to recover from the illness);
- (b) end-of-life practice (foregoing treatment vs assisted suicide vs euthanasia); and
- (c) decision making process (competent patient vs incompetent patient based on living will vs incompetent patient based on family wishes).

METHODS

The research design was a cross-sectional survey of 2019 Canadians interviewed in their homes between 18 August and 10 September 1992. Based on an analysis of Statistics Canada population data and a stratification of the population by 10 regions and four community sizes, a representative sample was drawn by identifying 191 sampling points across Canada

(excluding the Yukon and North West territories) and then establishing overall quotas, as well as age, sex and working women quotas, for each sampling point. The sample excludes Canadians < 18 years of age, and those living in the Yukon or North West Territories or in institutions (armed forces barracks, hospitals and prisons). The questionnaires were distributed to 150 trained interviewers along with a map of their allocated areas. Starting with a pre-selected address, the interviewers completed the number of interviews allocated. Interviewers began the interviewing process by choosing one respondent within each household according to eligibility (18 years and over) and willingness to participate; however, interviewers were also required to choose respondents so as to fill age, sex and working women quotas, thus ensuring the representativeness of the sample. To maximize the response rate, households were given advance written notice of the survey, and respondents were offered a \$2 lottery ticket.

The questionnaire, which is shown in the Appendix, has 13 items: 12 which elicit attitudes regarding end-of-life decisions and one which asks whether respondents had completed a living will. The 12 attitude questions were designed to systematically vary key factors in the fact situation:

(a) patient prognosis (likely vs unlikely to recover from the illness);

- (b) end-of-life practice (foregoing treatment vs assisted suicide vs euthanasia); and
- (c) and decision making process (competent patient vs incompetent patient based on living will vs incompetent patient based on family wishes).

The fixed response frame for the 12 attitude items was: 'approve'; 'disapprove'; or 'don't know/no answer'. Interviews were conducted in the language of choice (French or English) of each respondent.

The data were weighted according to the actual population of the 10 geographic regions. The margin of sampling error for a sample of this size is estimated to be 2.2%. The study was approved by the Human Subjects Review Committee of the University of Toronto.

RESULTS

Of 12,570 attempts to interview potential respondents, the sampling quota was filled before 3739 were re-contacted, 3973 were not home, 100 were not re-approached, 385 had a language barrier, 2354 refused, and 2019 completed the interview. Of the 2019 respondents, 51% were female, 20% were 60 years of age or older, 60% were married and 67% were working outside the home.

Figure 1 shows public opinion regarding end-of-life decisions for various patient prognoses (likely vs

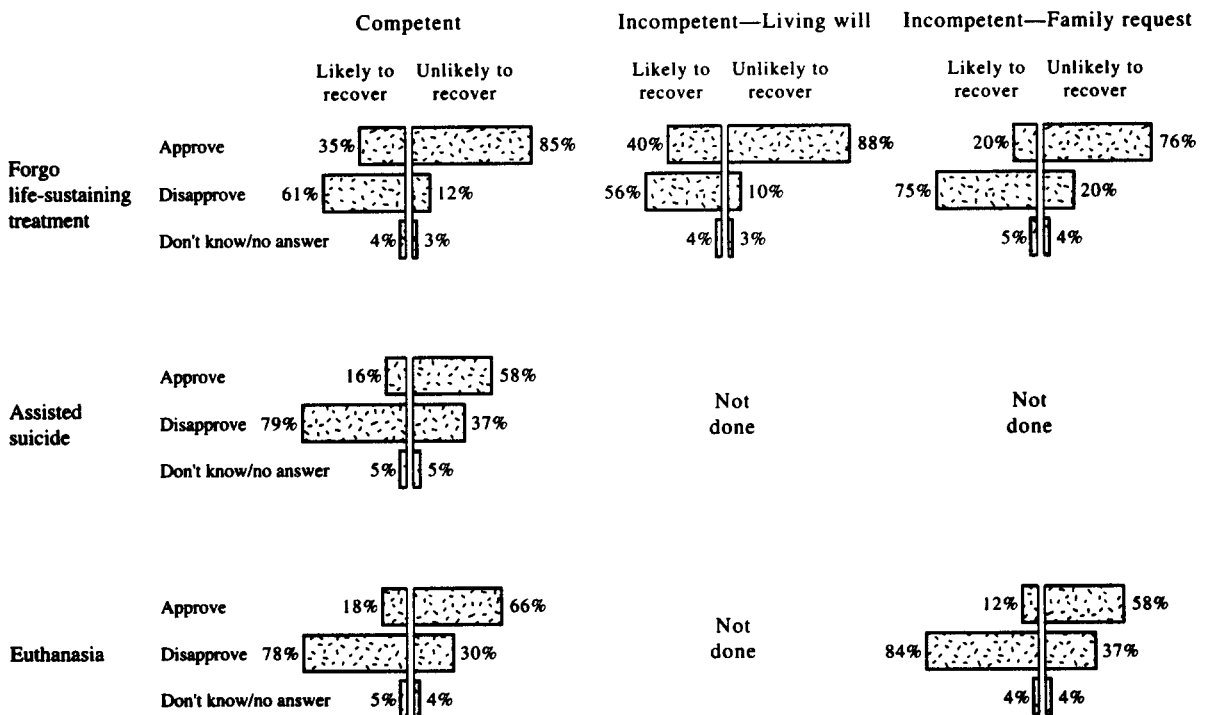


Fig. 1. Public opinion regarding end-of-life decisions. The height of the bar represents the proportion of respondents who approve, disapprove or don't know/provided no answer regarding legalization of each end-of-life practice (forgo life-sustaining treatment, assisted suicide and euthanasia) using each decision making process (competent person, incompetent person based on living will and incompetent person based on family request) for each patient prognosis (likely or unlikely to recover).

unlikely to recover from the illness), practices (foregoing life-sustaining treatment vs assisted suicide vs euthanasia), and decision making processes (competent patient vs incompetent patient with living will vs incompetent patient with family wishes).

The influence on public opinion of changing the patient's prognosis in the survey question from unlikely to likely to recover was examined in six situations combining various end-of-life practices with decision making processes. For instance, in the case of a decision to forgo life-sustaining treatment in a competent person, public approval was 85% if the person was unlikely to recover and 35% if the person was likely to recover. Therefore, compared to the patient unlikely to recover, public approval was 50 percentage points lower for the patient likely to recover. As shown in Fig. 1, the differences were similar in the other scenarios examined.

The influence on public opinion of changing the end-of-life practice in the survey question from foregoing life-sustaining treatment to assisted suicide to euthanasia was examined in the context of a competent patient either unlikely or likely to recover from his/her illness. For instance, in the case of a competent patient unlikely to recover, public approval was 85% for foregoing life-sustaining treatment, 58% for assisted suicide, and 66% for euthanasia. Therefore, compared to foregoing life-sustaining treatment, public approval was 27 percentage points lower for assisted suicide and 19 percentage points lower for euthanasia. As shown in Fig. 1, the differences were similar in the other scenarios examined.

The influence on public opinion of changing the decision making process in the survey question was examined in the case of foregoing life-sustaining treatment for a patient either unlikely or likely to recover. For instance, in the case of foregoing life-sustaining treatment for a patient unlikely to recover, public approval was 85% for a competent patient, 88% for an incompetent patient who had expressed his/her wishes in advance through a living will, and 76% for an incompetent patient based on a family's request. Therefore, compared to decisions made by competent patients, public support for decisions made on behalf of incompetent patients based on their living will was 3 percentage points higher and for decisions made on behalf of incompetent patients based on their families' wishes was 9 percentage points lower. As shown in Fig. 1, the differences were similar in the other scenarios examined.

Overall, 10% of respondents said they had filled out a living will. The proportion of respondents in various provinces who said they had filled out a living will is shown in Table 1. The proportion of respondents who had filled out a living will over various age groups was 4% for those 18–29 years, 9% for those 30–44 years, 10% for those 45–59 years, and 20% for those 60 years or older.

Table 1. Proportion of respondents who have filled out a living will by province

Province	Number of respondents	Proportion with living will (%)
Atlantic provinces	272	7
Quebec	500	11
Ontario	562	8
Manitoba	113	14
Saskatchewan	130	8
Alberta	220	9
British Columbia	222	16

DISCUSSION

Prognosis had a major effect on public opinion regarding end-of-life decisions. The majority of respondents would support laws permitting decisions to forgo life-sustaining treatment, assisted suicide and euthanasia for patients who are unlikely to recover but would oppose such laws for patients who are likely to recover. Our findings corroborate those of Genius *et al.* who found using case vignettes 65% public support for euthanasia in the case of an elderly, terminally ill man experiencing severe pain but only 35% public support for euthanasia in the case of a chronically disabled elderly person [11]. As a matter of philosophical principles, these results suggest that respondents accord higher priority to the preservation of life than to respect for patient autonomy. As a matter of public policy, the results suggest that respondents would support legislative initiatives restricted to terminally ill persons (as was the successful Oregon initiative [4]) but may oppose initiatives that also include patients who are likely to recover from their illness. Whether legalized euthanasia and assisted suicide can be successfully restricted, either in law or practice, to such patients remains an unanswered question.

The type of end-of-life practice had a moderate impact on public support. Public support was higher for decisions to forgo treatment than for euthanasia or assisted suicide. Despite philosophic arguments that deny the distinction between 'active' and 'passive' euthanasia [12], these results suggest that the public perceives a distinction. Surprisingly, our results showed more public support for euthanasia than assisted suicide. Quill *et al.* have argued that because the risk of abuse of euthanasia is greater than that of assisted suicide, assisted suicide should be legalized but euthanasia should not [9]. This strategy was thought to be important to the success of the Oregon initiative [4]. By contrast, our results suggest that expanding legislative initiatives to include both assisted suicide and euthanasia would only increase public support. Why people seem to prefer euthanasia to assisted suicide is unclear; perhaps people fear a botched suicide attempt or believe that the death will be more comfortable if it occurs at the hands of a physician.

The decision making process had a minor impact on public support. Compared to decisions made by competent patients, public support was slightly higher for decisions made on behalf of incompetent patients

based on their living will. This is disturbing because the best established legal standard for decision making is the contemporaneous decision of a competent person; a living will is intended to approximate this standard in the situation of a competent person who later becomes incompetent [13]. Although the reason for this finding is unclear, perhaps people find (false) comfort in the formality of a written document. Public support was lower for decisions on behalf of an incompetent patient based on a family's request than for such decisions based on a living will. This result accords with the primacy of the expressed wishes standard over the substituted judgment standard in substitute decision making for incapable persons [14].

Our results regarding Canadian public opinion for euthanasia and assisted suicide in the case of patients who are unlikely to recover are similar to a poll of US public opinion conducted by Blendon *et al.* [10]. However, the poll by Blendon *et al.* [10] did not probe public opinion regarding patients who are likely to recover from their illnesses. Our results show a dramatic shift in public opinion for this group of patients. When legislators and policymakers interpret the results of public opinion polls regarding euthanasia and assisted suicide, they should bear in mind that the questions not asked (i.e. about the legal permissibility of euthanasia and assisted suicide for non-terminally ill patients, a group with the same legal rights as terminally ill patients) may be just as important as the those questions that were asked.

Our study found that 10% of Canadians had filled out living wills. In a previous poll of 1000 Ontarians, we found that 12% had completed a living will [15] (in the Ontario subgroup of our current poll, 8% had filled out a living will). These figures compare with 24% of Americans in the study by Blendon *et al.* [10]. Since our study was conducted when only two provinces—Nova Scotia [16] and Quebec [17]—had legislation on living wills, and in both cases the legislation was limited to proxy directives, it will prove helpful to evaluate the impact of living will legislation and programs in Canada in the future. Subsequently living will legislation has been passed in three other provinces—Manitoba [18], Ontario [19] and British Columbia [20].

Our study has five main limitations. First, it is possible that non-respondents hold different views than respondents (non-response bias). We took several steps (for example, advance written notice of the study and offering a lottery ticket) to maximize our response rate which, in fact, compares favourably to the industry standard for surveys of public opinion [21]. Even if the views of non-respondents differ from those of respondents, there is no reason to believe that the effects of changing the survey questions (regarding prognosis, practice and process) would differ between these two groups. Second, it is possible that respondents gave us the answers they thought we wanted to hear rather than their authentic beliefs (social desirability bias). Third, these data are

generalizable to Canada but may not be generalizable to other jurisdictions. As noted above, however, our results are similar to those obtained by Blendon *et al.* [10] in the U.S. Fourth, our questions only examined *physician-assisted* euthanasia and assisted suicide; our results may not be generalizable to situations in which a physician is not involved. Finally, public support of a proposed law does not necessarily imply legal or ethical appropriateness [22]. To make this leap in the latter case is to commit the naturalistic fallacy of deriving moral conclusions from non-moral premises, of deriving the 'ought' from the 'is'.

Despite these limitations, our data contribute to the debate on end-of-life issues. They demonstrate the major effect of prognosis, the moderate effect of end-of-life practice, and the minor effect of decision making process on public opinion regarding end-of-life decisions.

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APPENDIX

I am now going to ask you some questions about allowing physicians to stop or not start providing patients with life-sustaining treatments such as respirators or breathing machines.

1. If a patient who is in a clear state of mind, requests that life-sustaining treatment be stopped or not started, would you approve or disapprove of a law which would permit a physician to follow the patient's wishes in the following situations:

- (a) When it is likely the patient will recover from his or her illness?
- (b) When it is unlikely the patient will recover from his or her illness?

2. If the family of an unconscious patient, whose prior wishes are unknown, requests that life-sustaining treatment be stopped or not started for that patient, would you approve or disapprove of a law which would permit a physician to follow the family's wishes in the following situations:

- (a) When it is likely the patient will recover from his or her illness?
- (b) When it is unlikely the patient will recover from his or her illness?

I would now like to ask you questions about 'living wills'. A 'living will' is a document you make to guide treatment decisions if you become unable to make these decisions for yourself. The 'living will' may specify who shall make decisions

and/or what life-sustaining treatment you do or do not wish to receive.

3. If an unconscious patient has made a previous request in a living will to have physicians stop or not start life-sustaining treatments, would you approve or disapprove of a law which would permit a physician to follow the patient's wishes in the following situations:

- (a) When it is likely the patient will recover from his or her illness?
- (b) When it is unlikely the patient will recover from his or her illness?

4. Have you filled out a 'living will'?

Assisted suicide means that a physician helps an adult patient to die, for example, by providing the patient with sleeping pills which the patient may later choose to take to commit suicide.

5. If a patient, who is in a clear state of mind, requests assisted suicide, would you approve or disapprove of a law which would permit a physician to follow the patient's wishes in the following situation:

- (a) When it is likely the patient will recover from his or her illness?
- (b) When it is unlikely the patient will recover from his or her illness?

Euthanasia means that a physician deliberately and actively causes the death of a patient, for example, by injecting a lethal drug.

6. If a patient, who is in a clear state of mind, requests euthanasia, would you approve or disapprove of a law which would permit a physician to follow the patient's wishes in the following situations:

- (a) When it is likely the patient will recover from his or her illness?
- (b) When it is unlikely the patient will recover from his or her illness?

7. If the family of an unconscious patient, whose prior wishes are unknown, requests euthanasia for that patient, would you approve or disapprove of a law which permits a physician to follow the family's wishes in the following situations:

- (a) When it is likely the patient will recover from his or her illness?
- (b) When it is unlikely the patient will recover from his or her illness?