

## AN OPINION SURVEY ON ATTITUDES TOWARD MEDICAL ASSISTANCE IN DYING IN UNDERGRADUATE STUDENTS

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### Abstract

The purpose of this study was to survey opinions on Medical Assistance in Dying (MAiD) and to examine factors that correlate with its acceptance or rejection. Participants received questions that asked about demographic information (such as age and gender), and were asked their opinions on positive and negative attitudes toward MAiD. We measured participants' fear of death, religiosity, social connectedness and assurance, depression, anxiety, stress, self-efficacy and satisfaction with life. A total of 168 undergraduate students at an eastern Canadian university participated in the study. The average age was 21.15 years ( $SD = 5.68$ ; range = 18-46 years). We received scores across the range (strongly disagree to strongly agree) on all MAiD questions, indicating varied opinions. Several gender differences were noted. Women were more likely to agree that MAiD reduced the stigma of end-of-life thoughts whereas men were more likely to be neutral in this area. Men were less likely than women to fear death. Both men and women were neutral on whether they thought the legalization of MAiD was a slippery slope that could go further than planned. Other results indicated that Canadian-born participants (versus those born abroad) were less religious and were more agreeable to MAiD; they also scored higher on fear of death. Participants were asked if they would consider MAiD for themselves if they were suffering from an incurable disease in the future. A hierarchical regression analysis indicated that those who scored higher on agreement were less likely to be religious, but more likely to be born in Canada and score higher on social assurance. These results provide a snapshot of the opinions of young adults and can be used for future comparisons.

**Keywords:** MAiD, Medical Assistance in Dying, opinions, attitudes.

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### 1. Introduction

Medical assistance in dying (MAiD) occurs when patients request assistance from qualified health professionals to end their lives. MAiD was legalized in Canada in 2016 under certain guidelines and safeguards. Most patients requesting MAiD list cancer as the primary reason for their request, and most individuals are over the age of 75 (Government of Canada, 2025). The topic of MAiD continues to be widely debated and discussed, and arguments exist both for and against the procedure (Kirchhoffer & Lui, 2021). Arguments for MAiD often include aspects of personal rights and autonomy, dignity, and alleviation of pain and suffering; arguments against include the belief in the sanctity of life, the fear of a slippery slope extending further than intended, and concern for vulnerable individuals (Claxton-Oldfield & Miller, 2015).

Research examining the correlates of positive and negative attitudes toward MAiD is in its infancy. Studies largely focus on religiosity and find that those who score higher tend to oppose MAiD (Harper, Tomaras, Powell, Reddon, & Hawrelak, 2025; Hawrelak, Harper, Reddon, & Powell, 2022). In two of the few studies published looking at other correlates of MAiD, Harper et al. (2025) and Hawrelak et al. (2021) found support varied under different scenarios and was influenced by religiosity, political stance, ethnicity, and personality. We sought to expand on this research by examining whether fear of death, depression, anxiety, stress, satisfaction with life, social connectedness and assurance, and self-efficacy predicted support or rejection of MAiD.

### 2. Objectives

The objectives of this study were to survey attitudes toward MAiD and to examine predictors of its acceptance or rejection.

### 3. Method

#### 3.1. Participants

A total of 168 participants completed a series of questionnaires. They were recruited from undergraduate courses at a small eastern university in Canada. The average age of participants was 21.15 years ( $SD = 5.62$ ; age range 18 - 46). The sample was predominantly comprised of women (79.2% women; 18.4% men; 1.2% transgender male; 1.2% non-binary). The majority of participants were single (91%), identified as white ancestry (72.5%), and born in Canada (74.4%).

#### 3.2. Measures

**Demographic Questionnaire** (adapted from Angus Reid Institute, 2016; Annoh-Kwafo, 2020; Falconer et al., 2019; Hizo-Abes, Siegel, & Shreier, 2018). A demographic questionnaire was designed for this study. This questionnaire asked about age, gender, marital status, ethnicity, country of birth, religious affiliation, religiosity, spirituality, and political party affiliation.

**MAiD Survey.** The MAiD survey was based on a questionnaire compiled by Annoh-Kwafo (2020). Participants were asked, *regardless of whether you support or oppose MAiD, rate the legitimacy of the following reasons or arguments for and against MAiD.* The statements were rated on a 5-point Likert scale from 1 (*strongly disagree*) to 5 (*strongly agree*). The statements FOR MAiD appear in Table 1; the statements AGAINST MAiD are in Table 2 and the source for each statement is listed in the notes below each table.

Participants were also asked, *in the future, if you were suffering from an incurable disease, would you consider MAiD for yourself?* This question was adapted from Hizo-Abes et al. (2018) and was rated from 1 (*never consider*) to 5 (*strongly consider*). Finally, they were asked to rate their fear of death (*the thought of death frightens me*) on a scale of 1 (*strongly disagree*) to 5 (*strongly agree*).

**The Depression, Anxiety Stress Scale – 21 (DASS-21; Lovibond & Lovibond, 1995).** The DASS-21 is a 21-item questionnaire with three subscales comprised of 7 items each: depression, anxiety and stress. Each item is rated on a 4-point Likert scale from 0 (*did not apply to me at all*) to 3 (*applied to me very much or most of the time*). The scale has been widely used in research and is a reliable measure. Cronbach's  $\alpha$  in the current study was .89 (depression), .83 (anxiety), and .82 (stress).

**The Social Connectedness and Social Assurance Scales (SCS and SAS; Lee & Robbins, 1995).** These two scales measure a sense of belongingness. They are comprised of 8 items each and are measured on a 6-point Likert scale ranging from 1 (*strongly agree*) to 6 (*strongly disagree*). Items are worded in the negative direction; thus, higher scores are indicative of more social connectedness and assurance. Cronbach's  $\alpha$  in the current study was .95 (SCS) and .85 (SAS).

**The New General Self-Efficacy Scale (SE; Chen, Gully, & Eden, 2001).** This scale measures perceived ability to engage in, and accomplish, a number of tasks. It is an 8-item measure and is scored on a 5-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). Cronbach's  $\alpha$  in the current study was .91.

**The Satisfaction with Life Scale (SWLS; Diener, Emmons, Larsen, & Griffin, 1985).** This scale measures general satisfaction with life. It is comprised of 5 items and is measured on a 7-point Likert scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). It is widely used in research and had good internal reliability in this study (Cronbach's  $\alpha = .87$ ).

#### 3.3. Procedure

Undergraduate students could earn 0.5 bonus points toward their final grade for participation in research. Those who were interested were directed to an online description of available research studies. If they wished to participate in this study, they were directed to Qualtrics, the online survey platform. A consent form appeared first, detailing the nature of the study. They were also told that the study was anonymous, and that they could refuse to answer any questions. They then had to click a button to agree to participate or they could exit the survey. The consent form was followed by the demographic measure, and then the remaining questionnaires were presented in random order. The study took approximately 20 minutes to complete.

### 4. Results

#### 4.1. Data analyses

We had complete data on 169 participants. One participant was deleted from the data set (thus  $N = 168$ ) because they were a univariate outlier on two variables and were also flagged as a multivariate outlier using Mahalanobis Distance.

**4.1.1. Survey results and group differences.** Table 1 displays four arguments FOR MAiD, and the participants' responses.

*Table 1. Percentage of Respondents' Agreement on the Legitimacy of Reasons for Medical Assistance in Dying.*

Statement	Strongly Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Strongly Agree	<i>M (SD)</i>
1. Allowing Medical Assistance in Dying respects the autonomy of patients to make decisions about their own health, life, and death.	3.6	3.6	4.2	31.7	56.9	4.35 (.98)
2. In some cases, Medical Assistance in Dying reduces suffering.	3.6	0.6	3.6	27.4	64.9	4.49 (.89)
3. Medical Assistance in Dying permits one to die without stigma of suicide.	7.1	9.5	14.3	28.0	41.1	3.86 (1.25)
4. People who are suffering from incurable or terminal conditions may wish to avoid living in states that they perceive to lack dignity, or they may want to be remembered in particular ways.	1.8	1.2	10.8	31.1	55.1	4.37 (.86)

*Note.* Source for questions 1-3 was Falconer et al. (2019); question 4 was the Alberta Health Services Clinical Ethics (2017).

As indicated in Table 1, most participants agreed or strongly agreed that the statements were legitimate reasons for allowing MAiD. The data were analyzed for gender differences (males and females only as there were too few other genders) using independent samples *t*-tests. Women scored higher in their agreement on item #3 than did men (*M* women = 3.96; *M* men = 3.39; *t* = 2.02, *p* = .05). No other gender differences were detected. Differences were also found for country of birth (Canada versus Other). Canada had higher *M scores* on all four items (all *p* < .001). Finally, the data were analyzed for political leaning (left versus right). Differences were found on items 1, 2, and 4 (all *p* < .05); those leaning left had higher *M scores* than those leaning right.

Table 2 displays six arguments AGAINST MAiD, and the participants' responses.

*Table 2. Percentage of Respondents' Agreement on the Legitimacy of Reasons Against Medical Assistance in Dying.*

Statement	Strongly Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Strongly Agree	<i>M (SD)</i>
1. Life is sacred and should therefore be preserved, despite the circumstances.	12.5	35.7	14.9	20.2	16.7	2.93 (1.32)
2. Palliative care is adequate to provide patients with relief from intolerable suffering.	11.3	25.6	14.3	32.7	16.1	3.17 (1.29)
3. No safeguards can adequately protect vulnerable persons from unwanted or coerced Medical Assistance in Dying.	11.4	32.5	31.9	15.7	8.4	2.77 (1.11)
4. Legalization of Medical Assistance in Dying is a slippery slope and may end up going further than originally planned.	12.5	27.4	25.0	28.0	7.1	2.90 (1.16)
5. The decision to end life sits with a higher being/power (God, Allah, the Creator, etc.) so humans should not interfere with this greater plan.	42.9	19.0	11.9	13.1	13.1	2.35 (1.46)
6. The availability of Medical Assistance in Dying could lead to greater pressure on vulnerable people to choose Medical Assistance in Dying.	8.9	20.8	20.2	33.9	16.1	3.27 (1.22)

*Note.* Source for questions 1-3 was Falconer et al. (2019); question 4 was Angus Reid Institute (2016); questions 5-6 was the Alberta Health Services Clinical Ethics (2017).

As indicated by the *M* scores in Table 2, participants were more neutral on whether the statements were legitimate arguments AGAINST MAiD. Men ( $M = 3.42$ ) scored higher than women ( $M = 2.81$ ) on item # 1 ( $t = -2.33, p = .02$ ). Those born in Canada scored lower on all items than those born in other countries (all  $p < .006$ ). Further, those leaning right scored higher than those leaning left on items 1, 4, and 5 (all  $p < .01$ ).

Other differences noted were that men ( $M = 2.84$ ) were less likely than women ( $M = 3.67$ ) to fear death ( $t = 3.34, p = .001$ ). Those born in Canada ( $M = 1.99$ ) rated themselves as less religious than those born abroad ( $M = 3.14; t = -5.44, p < .001$ ), were more agreeable to MAiD ( $M$  Canada = 3.39;  $M$  Other = 2.77;  $t = 2.86, p = .005$ ) and more likely to fear death ( $M$  Canada = 3.69;  $M$  Other = 3.07;  $t = 2.74, p = .007$ ). Further, those leaning right scored higher on religiosity ( $M$  right = 2.75;  $M$  left = 1.95;  $t = -3.43, p < .001$ ), lower on MAiD ( $M$  right = 2.83;  $M$  left = 3.47;  $t = 2.78, p = .006$ ), and fear of death ( $M$  right = 3.23;  $M$  left = 3.73;  $t = 2.00, p < .04$ ). Finally, those leaning right had lower stress scores ( $M$  right = 0.89;  $M$  left = 1.12;  $t = 2.05, p = .04$ ) and higher satisfaction with life scores ( $M$  right = 5.17;  $M$  left = 4.69;  $t = -2.18, p = .03$ ). No other group differences were found.

**4.1.2. Correlations, Regression Survey Results, and Group Differences.** Participants were asked (on a 5-point scale) whether they would consider MAiD for themselves if they were suffering from an incurable disease in the future. Significant positive correlations were found with social assurance ( $r = .21$ ), depression ( $r = .21$ ), anxiety ( $r = .25$ ), and stress ( $r = .25$ ), and significant negative correlations were found with religiosity ( $r = -.44$ ) and satisfaction with life ( $r = -.15$ ; all  $p < .01$ ). No statistically significant correlations were found between MAiD and age, spirituality, fear of death, social connectedness, and self-efficacy.

To further examine the relation among variables, a hierarchical regression analysis was conducted predicting whether participants would choose MAiD for themselves. Gender (male, female) and place of birth (Canada, Other) were entered on the first step. Religiosity and political leaning (left vs right) were entered on the second step. On the final step, the variables with significant zero-order correlations (social assurance, depression, anxiety, stress, and satisfaction with life) were added.

The overall model was statistically significant  $F(9, 128) = 6.48, p < .001$ , and accounted for 31% of the variance. The first step was significant  $F(2, 135) = 3.93, p = .022, R^2 = .06$ . Canadians scored higher on MAiD than did those born abroad. The second step was significant  $\Delta F(2, 133) = 14.72, p < .001, \Delta R^2 = .17$ . People scoring lower on religiosity were more likely to endorse MAiD ( $\beta = -.41$ ). The final step was also significant  $\Delta F(5, 128) = 3.23, p = .009, \Delta R^2 = .09$ . People scoring higher on social assurance were more likely to endorse MAiD ( $\beta = .25$ ). The adjusted  $R^2$  of .27 suggests that roughly one quarter of the variance in considering MAiD for oneself was predicted by place of birth (Canada), lower scores on religiosity, and higher scores on social assurance.

## 5. Discussion

This study provided data on attitudes toward MAiD in a younger Canadian sample. The practice of MAiD is in its 10<sup>th</sup> year in Canada, and thus, published data is sparse, but slowly increasing. Participants in this study generally supported the legitimacy of arguments for MAiD. In other words, they agreed that valid reasons for choosing MAiD were that it allowed patients autonomy in decision-making, it can reduce suffering, provides dignity, and alleviates the stigma of suicide. In this last regard, women were more likely to agree with this statement. Participants born in Canada were more likely to agree with MAiD than those born abroad. The sample in this study was, for the most part, young Canadian adults, who have now spent just under half their lives being exposed to the legalization of MAiD in Canada. Those born in other countries may not have experience with the practice and may be more reserved in their opinions. Further, those with left leanings in terms of their political choices were more open to MAiD than those leaning right. Indeed, the Conservative Party opposes MAiD in principle in Canada (Conservative Party of Canada, 2023).

Responses to the validity of arguments against MAiD were more neutral. Participants were neutral on whether they thought MAiD could lead to a slippery slope (roughly the same proportion of respondents agreed and disagreed). Slightly more agreed that palliative care was a valid option over MAiD, and that the availability of MAiD puts vulnerable people at risk in that they may feel undue pressure. More participants disagreed that end-of-life decisions rest with a higher power, and that no safeguards can protect vulnerable people from coercion. Men scored higher in the belief that life is sacred and should always be preserved. Further, participants born abroad scored higher on all arguments against MAiD, and right leaning participants scored higher on half of these items.

The correlational analyses revealed that people who were more likely to choose MAiD for themselves in the future if they were suffering from an incurable disease, scored higher on depression, anxiety, and stress, and scored lower on life satisfaction and religiosity; however, they reported a higher sense of self-assurance. The relations among these variables were examined further in a hierarchical regression analysis. Choosing MAiD for oneself at some point in the future was predicted by place of birth (Canada), lower scores on religiosity, and higher scores on social assurance. Of these variables, lower religiosity (regardless of religious affiliation) contributed the most variance in choosing MAiD. None of the other mental health variables (depression, anxiety, stress, life satisfaction) reached significance.

This study surveyed positive and negative attitudes about MAiD and offers a springboard for others to expand on this work. However, there were a number of limitations in this study. First, the sample was largely young adults. They tend, on average, to be healthier and view end-of-life decisions as something in the distant future. The sample was also largely women. More research is needed on older adults with a gender balanced sample. Finally, although the sample size was adequate for our analyses, more data needs to be collected on larger sample sizes, and varied gender and age ranges across the country. In conclusion, MAiD is a difficult and often emotionally charged topic. It encompasses legal issues and provokes thoughtful questions about health care and vulnerability. Research in this area is needed.

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