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The preliminary opinion of Canadian spine surgeons on Medical Assistance in Dying (MAID); a cross-sectional survey of Canadian Spine Society (CSS) members

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ABSTRACT

Background: On June 17, 2016, providing medical assistance in dying became legal in Canada. This controversial change has had reverberating implications for the entire medical community. This is especially true for physicians that regularly deal with end-of-life decisions, among them neurosurgical and orthopedic spine surgeons, whose patients suffer from a variety of debilitating conditions. With this study we sought to document the opinions of Canadian spine surgeons in hopes of better understanding the sentiment within the speciality towards this change and assess how it evolves over time.

Methods: A cross-sectional survey was sent out to members of the Canadian Spine Society (CSS). The survey encompassed 21 questions pertaining to opinions and attitudes regarding MAID and different facets of the legislation.

Results: A total of 51 surgeons responded to the survey, comprised of a mix of orthopedic surgeons (68.6%), pediatric orthopedic surgeons (5.9%), and neurosurgeons (21.6%), practicing all across Canada. The majority support the patients' right to obtain MAID (62.8%) and the right of physicians to participate (82.4%). Most also support the right to conscientious objection (90.1%). The results were split on duty to refer patients for MAID (49.0%). Respondents were also divided on whether they could foresee themselves referring to a MAID service, with 37.2% responding yes. A small minority of respondents (3.9%) felt they could see themselves actively involved in MAID.

Conclusions: At the advent of legal MAID, the majority of members of the CSS supported both the right of patients to participate in MAID and the right of physicians to provide this service if they so choose, while still respecting the principle of conscientious objection. Of note, only a small minority were willing to be actively involved. This survey provides a useful baseline of opinions in this practice area and will be used to analyze changes over the next 10 years.

1. Background

The Supreme Court of Canada's 2015 decision in *Carter v. Canada* represented a monumental legal and ethical shift by ruling that the prohibition of assisted suicide was contrary to the *Canadian Charter of Rights and Freedoms* [1] The Court granted physician the ability to provide medical assistance in dying to competent adults who, in the Court's words, met these two criteria:

1 clearly consents to the termination of life, and
2 has a grievous and irremediable medical condition (including an illness, disease or disability) that causes enduring suffering that is intolerable to the individual in the circumstances of his or her condition [1].

However, the Court suspended the effect of their ruling for 1 year to give the government time to enact responsive legislation.

Over that year, the Canadian government underwent a process of consultation and review of international practices in order to further delineate the eligibility criteria and define who can access medical assistance in dying, or MAID as it is commonly referred to [2]. On June 17th 2016, the legal ban on physician assisted death expired, and new legislation came into effect, that allowed for medical assistance in death

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– commonly referred to as Bill C-14[1] [3]. Under Bill C-14, to be eligible for MAID **all** of the following criteria must be met:

(A) be eligible for health services funded by a government in Canada;
(B) be at least 18 years old and capable of making decisions with respect to their health;
(C) have a grievous and irremediable medical condition;
(D) have made a voluntary request for medical assistance in dying that was not made as a result of external pressure; and
(E) give informed consent to receive medical assistance in dying after having been informed of the means that are available to relieve their suffering, including palliative care [3].

The legislation then goes on to further define what constitutes a 'grievous and irremediable medical condition', stipulating that patients must meet **all** of the following criteria:

(A) they have a serious and incurable illness, disease or disability;
(B) they are in an advanced state of irreversible decline in capability;
(C) that illness, disease or disability or that state of decline causes them enduring physical or psychological suffering that is intolerable to them and that cannot be relieved under conditions that they consider acceptable; and
(D) their natural death has become reasonably foreseeable, taking into account all of their medical circumstances, without a prognosis necessarily having been made as to the specific length of time that they have remaining [3].

These definitions are more restrictive than those the Court outlined in *Carter* and provide further specifications, such as that individuals must be in an "advanced state of decline" and their "natural death must be reasonably foreseeable". However, both these terms were left undefined and, therefore, lack specific guidance for interpretation, creating grey areas in the how the legislation will be applied [4]. Bill C-14 also leaves unanswered questions about certain patient populations, including mature minors, those with mental illness and those whose medical conditions would require them to access this resource through an advanced directive. The government has sought independent study on these three groups of patients [5].

Another possible issue is access, as currently, the legislation allows for conscientious objection and does not force a physician to provide or help in the provision of MAID. It is up to the provinces and territories to regulate how and where MAID services will be provided through care coordination systems, leaving some room for differences in accessibility to MAID services across Canada [6].

Grey areas aside, this significant change in the law has potential implications for the entire Canadian medical community, and, in particular, within the world of neurosurgery and orthopedic spine surgery. The effect on these specialities could be predicted by looking at the two parties involved in the ground-breaking *Carter* case. The lead plaintiff in the case was Lee Carter, the daughter of a woman who suffered from degenerative cervical myelopathy and who sought medical assistance in dying in Switzerland. The second party was Gloria Taylor, who suffered from amyotrophic lateral sclerosis, and passed away prior to this legislation taking effect.

As expected, this landmark decision shifted the conversations healthcare providers can have with their patients and reverberated within the neurosurgical field. These reverberations prompted the Canadian Neurosurgical Society (CNSS) to come forth with a position statement and has led to further research into what this means for surgeons practicing today in Canada [7]. With this study, we sought to examine the preliminary opinions of Canadian neurosurgeons and orthopedic spine surgeons regarding MAID, in hopes of better understanding the current landscape that exists within our field. Given the magnitude of this legislative change to the way medicine is practiced in Canada, studying the opinions of physicians close to patients requesting MAID will provide crucial information for any review of the legislation, and for other countries looking to enact similar legislation.

Going forward, the results of this survey will provide the basis for comparative analysis on the opinion of spine surgeons after 10 years of practice in a world with legal MAID. Future surveys will also be able to consider any legislative changes caused by interpretive court cases, the outcome of the Council of Canadian Academies (CCA) reports on grey areas regarding requests by mature minors, advance requests and requests where mental illness is the sole underlying medical condition [8], as well as the government's own Interim Reports [9].

2. Methods

This survey study was a cross-sectional survey of active Canadian Spine Society (CSS) members to develop an understanding of their opinions and attitudes with respect to MAID. The CSS is comprised of 140 members, representing both neurosurgeons and orthopedic surgeons and residents, as well as allied health spine professionals in Canada. All 140 surgeon members of the CSS were invited to participate.

The survey questions were developed by reviewing the current legislation, published articles, and by consulting with experts in the field of bioethics. Pilot testing to confirm face validity was performed in two stages. The first was by a group of peer reviewers (three neurosurgery residents and three neurosurgeons), who provided input and recommendations on the face validity of the survey items. For the second stage, all reviewers were asked for feedback on item accuracy, purpose, organization, clarity, appearance, understandability and adequacy. Results from the pilot testing informed any modifications of the survey items.

The survey itself was comprised of 21 questions, using both a Likert Scale and multiple-choice format. The first five questions sought to delineate demographic data regarding the responders, and the remaining questions focused on eliciting their opinions with respect to MAID. The last question allowed participants to select from a list of spine conditions which they felt may warrant consideration for MAID, and also left responders with the option to add their own input in a blank text box.

A link to the online survey was sent to CSS members, using Select-Survey, which is available as a secure site within the provincial health authority of the senior author [10]. Participants were sent two links – one for the survey in English (Appendix A) and the other for the survey in French (Appendix B). Three reminder emails were sent out to encourage participation. To further promote participation, a draw was held for a free annual membership for the CSS. Data was collected in the online surveys from May-June 2016.

3. Results

A total of 51 out of 140 surgeons responded to the survey, which is a 36.43% response rate, comprising a mix of orthopedic surgeons (68.6%), pediatric orthopedic surgeons (5.9%) and neurosurgeons (21.6%). Their location of practice ranged from Eastern to Western Canada, they had varying years of experience practicing as a surgeon, and they were distributed through both academic and non-academic centres (see Table A.1).

[1] Please note that this paper does not explore the differences in how and where MAID is provided between Canadian provinces and territories, who have the ability to enact regulations regarding the provision of MAID that are not contrary to *Carter* or Bill C-14, see online for an explanation of the role of provinces and territories by Government of Canada, *Medical assistance in dying*, available online at: https://www.canada.ca/en/health-canada/services/medical-assistance-dying.html [*Medical Assistance in Dying*]. Moreover, medically assisted dying is regulated in Quebec by both the federal *Criminal Code* and the provincial *An Act Respecting End of Life Care*, Chapter S-32.0001, available online at: http://legisquebec.gouv.qc.ca/en/ShowDoc/cs/S-32.0001.

3.1. Questions on personal stance on MAID

Personal stance in relation to MAID ranged, with 21.6% strongly supporting, 41.2% supporting, 21.6% neutral, 3.9% against and 9.8% strongly against (Figure A.1). There was no statistically significant association between years of practice and personal stance on MAID, nor was there any association between location of practice and stance on MAID, or specialty and stance on MAID (Figure A.2, A.3 and A.4).

3.2. Questions on participation in MAID

Most respondents supported the right of physicians to participate in MAID (82.4%) and there was a split in whether physicians felt it would impact their individual practice, with 39.2% feeling it would have some impact, 43.1% believing it would have no impact and 15.7% being unsure. The majority of respondents did not believe they have patients who fit the criteria of grievous and irremediable suffering (49%) and only a small number (15.7%) had been asked to provide physician assistance in dying by their patients prior to MAID.

The vast majority of respondents supported the right of physicians to conscientiously object to providing MAID (52.9% strongly support and 37.2% support). The question of whether there is a mandatory duty to refer patients to MAID was more contentious, with 49.0% saying yes, 37.2% saying no and 17.6% being unsure. (Figure A.5 and A.6). There was also a divide in whether physicians could see themselves referring to a MAID service, with 37.3% saying yes, 23.5% saying no and 37.2% being unsure. Only 3.9% felt they could ever see themselves actively involved in providing MAID. Most respondents believe that the treating physician might have bias against MAID for that consideration (49.0%), but did not feel that the attending physician should be removed from the inquiry process and decision making (29.4% yes, 52.9% no).

3.3. Questions on grey areas

In terms of the more controversial aspects of medical assistance in dying that have yet to be fully elucidated in the current legislation, attitudes were more evenly split. The majority felt it should be restricted to patients in whom death is reasonably foreseeable (52.9%), with a fairly even split in whether it should be accessible for mature minors (39.2% yes, 41.2% no). A similar result was found when asked about MAID for the mentally ill, with 31.3% believing it was potentially appropriate, 37.3% believing it was not and 21.6% being unsure. The most strongly supported group currently omitted from the current legislation was the right for advance directives in patients with neurodegenerative disorders, with 50.4% believing that subset of patients should have access to MAID (Figure A.7, A.8, A.9 and A.10).

3.4. Questions on appropriate conditions

The last question sought to look at which conditions were potentially appropriate to consider for physician assisted death, and a wide variety of conditions were listed for physicians to select from. The most commonly selected answer was metastatic spine tumour (76.5%)), with the next four more frequent responses being malignant intramedullary tumour (64.7%), primary malignant spine tumour (54.9%), cervical spinal cord injury with tetraplegia (49.0%) and multiple myeloma (33.3%). The remainder of the options had less than ten selections, with 6 respondents believing that no spine conditions are appropriate (for a full list see Figure A.11).

4. Discussion

Due to the nature of their practice, spine surgeons routinely encounter patients with severe and disabling conditions, from patients dealing with repercussions of a spinal cord injury to those diagnosed with malignant and metastatic tumours. It thus follows that these patients face a high burden of disease, which can lead them to explore various options, both from a palliative and end-of-life perspective. With the new legislation that has come into effect in Canada, the spectrum of options for these patients has expanded, and medical assistance in dying has become a legally viable option for those who feel that their condition has progressed to the point where their suffering has become intolerable and death is reasonably foreseeable.

This survey of practicing Canadian spine surgeons was designed to gain an understanding of the preliminary opinions of this speciality with respect to MAID and grey areas left by Bill C-14. In general, we have concluded that of those that responded, their preliminary overall position on this contentious issue was favourable, with 62.8% of respondents being in support of MAID and 82.4% supporting the right of physicians to participate in MAID when the appropriate criteria are satisfied. These results are similar to those from the survey of all neurosurgeons within the Canadian Neurosurgical Society, with their study showing 73% support for MAID, and 74% supporting the right of physicians to participate [11]. There was no statistical difference seen with respect to stance on MAID and years of experience, location of practice, or specialty. However, we note that the small number of respondents means that the study was not powered to detect a statistically significant effect.

Further limitations to our methodology are that the perceptions of respondents may differ from practice patterns and, as with all voluntary and anonymous surveys, these results are subject to a number of possible response biases. Voluntary response bias may overrepresent those who have strong opinions and at the same time, nonresponse bias is also a concern. We cannot exclude selection bias due to low response numbers as the survey sample may not accurately represent the population of spine surgeons in Canada.

Despite these limitations, the study raised interesting findings regarding conscientious objection, which refers to the situation whereby a physician refuses to provide, or participate in, a legally recognized medical treatment or procedure due to a conflict with his or her own ethical beliefs and values. There was overwhelming support for the right to conscientious objection (92% supporting), with a more mixed opinion regarding the mandatory duty to refer (47% yes vs 36% no). This discrepancy in results may be due to the perceived belief by some respondents that referral for MAID is akin to active involvement.

From the list of conditions used in the survey which were felt to be potentially appropriate to consider MAID, the most commonly selected answer was metastatic spine tumour, with the next four most frequent responses being malignant intramedullary tumour, primary malignant spine tumour, cervical spinal cord injury with tetraplegia and multiple myeloma. These conditions align with what is most commonly seen as the primary pathology for which MAID is sought, with cancer consistently topping the list, followed by neurodegenerative conditions [12]. In fact, data from the most recent interim report from June 2018 in Canada shows that cancer is the most frequently cited underlying medical condition, representing 63- 65% of all MAID cases, with neurodegenerative conditions representing 10–13% [13]. Interestingly, this contrasts with the fact that only 30% of respondents felt they had patients in their practice who may fit criteria for MAID, and only 40% who believed this would have an impact on their individual practice.

Since its inception in 2016, a number of qualitative studies have been done looking at the experiences of patients, family members and physicians involved in the MAID process within Canada. For example, one study out of Vancouver looked at the patient experience and found that patients felt it was important to have a sense of autonomy and control over their end of life decisions, and sought MAID because they felt they had an unacceptable quality of life, or were fearful of future suffering and disability [14]. That same group of researchers then looked at the primary supports of patients pursuing MAID and found that participants were supportive of their loved ones' decision, that it was a peaceful

process and that it offered advantages compared with a natural death for their loved ones' conditions [15].

Conversely, qualitative studies reviewed indicate that from a physician's standpoint, difficulties continue to exist after legalization of MAID, which is potentially reflected in the reticence of physicians towards participating in MAID. One study looked at sixteen physicians across the country who provide MAID and reviewed the challenges associated with its provision [16]. Important highlights included enhancement of relationships physicians had with other MAID providers, strains on relationships with objecting colleagues, inadequate financial compensation and increased workload associated with providing MAID services [16]. These findings support the position of the CNSS outlined in the *CNSS Position Paper*, which urged the creation of a parallel and independent counseling and referral service for patients and their families, and clear delineation between the MAID team and the treating surgical team to mitigate any potential for treatment bias [7].

The study at hand also demonstrates the need for ongoing discussions about effective and equitable delivery of MAID, in particular with respect to the cohort of patients and issues that have not been addressed with the current legislation, i.e. the grey areas. The survey results show a fairly even split with respect to opinions on mature minors (40% yes vs 42% no) and those with mental illness (35% yes vs 41% no), and a more decisive split for advanced directives (82% yes vs 10% no).

The opinions captured by the survey in question are similar to those from an informal poll of doctors of every practice type who attended the Canadian Medical Association annual meeting in 2017 regarding MAID, which found that:

- 83% supported allowing advanced directives,
- 67% backed the idea of mature minors being potential candidates, and
- 51% agreed when the sole diagnosis was mental illness [17].

These findings are also reflected in the political sphere, as the Canadian Parliament sought an independent review of these issues, pertaining to requests by mature minors, advance requests and requests where mental illness is the sole underlying medical condition [18]. An expert panel of the Canadian Council of Academics (CCA) was created to conduct this review, based on the available evidence, and the results were released on December 12, 2018 [8]. The reports do not provide recommendations – just a summary on the state of knowledge to assist decision-makers. Therefore, their results are not considered in this paper and will be reviewed in any follow up survey to assess how, if at all, the CCA reports have impacted the legislation.

End-of-life decisions are faced by physicians on a daily basis across the world. Currently, voluntary euthanasia and/or doctor-assisted suicide is legally available in Belgium, Australia (Victoria), Colombia, Luxembourg, The Netherlands, Switzerland, and the following US States: California, Colorado, Montana, Oregon, Vermont, New Jersey, Maine, Hawaii, District of Columbia and Washington State [18]. The results found in this study add to the literature analyzing the evolving views of practitioners on medical assistance in dying and can be useful for countries considering legislative changes in the future.

5. Conclusions

The important points to take away from this survey are the overall support that respondent spine surgeons within the CSS have for MAID, supporting both the right of patients to obtain MAID if the criteria are met, and the right of physicians to participate in MAID, if they so choose. The other key highlight is support for the role of conscientious objection . There remain some unanswered questions with respect to certain facets of the legislation, highlighting the continuously evolving nature of this conversation.

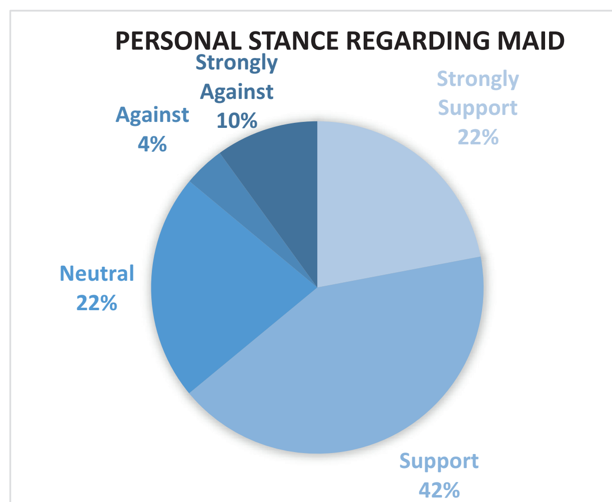

Fig. A.1. PERSONAL STANCE REGARDING MAID.

Table A.1
Demographic Data.

Role	
Attending	50 / 98%
Fellow	1 / 2%
Primary Clinical Focus	
Orthopedics	35 / 68.6%
Pediatric Orthopedics	3 / 5.9%
Neurosurgery	11 / 21.6%
No reply	2 / 3.9%
Region of Practice	
Western Canada (MB, SK, AB, BC)	16 / 31.4%
Central Canada (PQ, ON)	21 / 41.2%
Atlantic Provinces (NB, NS, PEI, NFLD)	10 / 19.6%
Other	7.8%
Years Practicing as Surgeon	
0 to 10	13 / 25.5%
11 to 20	14 / 27.4%
21 to 30	14 / 27.4%
31 or more	8 / 15.7%
No reply	2 / 3.9%
Academic Centre	
Yes	36 / 70.6%
No	13 / 25.5%
No reply	2 / 3.9%

Declaration of Competing Interest

There was no funding associated with this study, and as such no study funding sources, and no potential conflict of interest-associated biases.

Supplementary materials

Supplementary material associated with this article can be found, in the online version, at doi:10.1016/j.xnsj.2020.100037.

Appendix A. See below

Figs. A.1–A.11
Table A.1

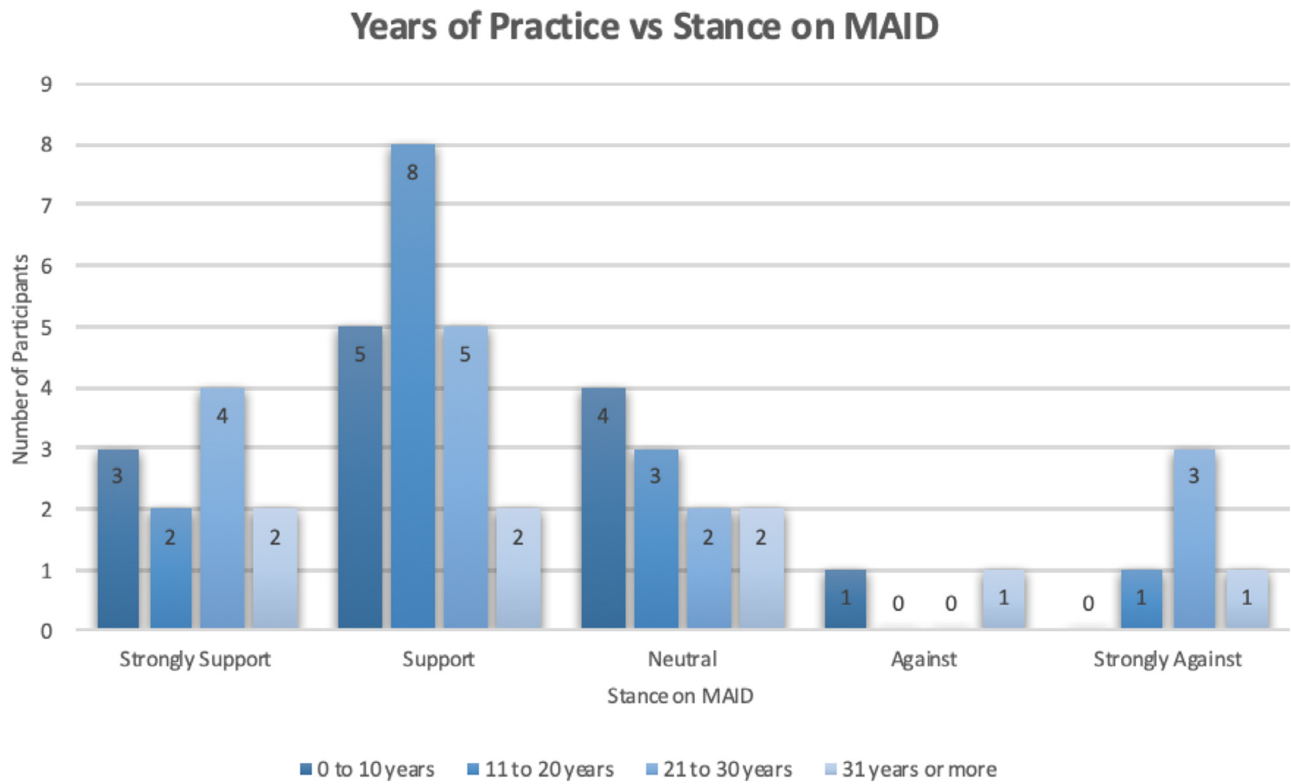

Fig. A.2. Years of Practice vs Stance on MAID.

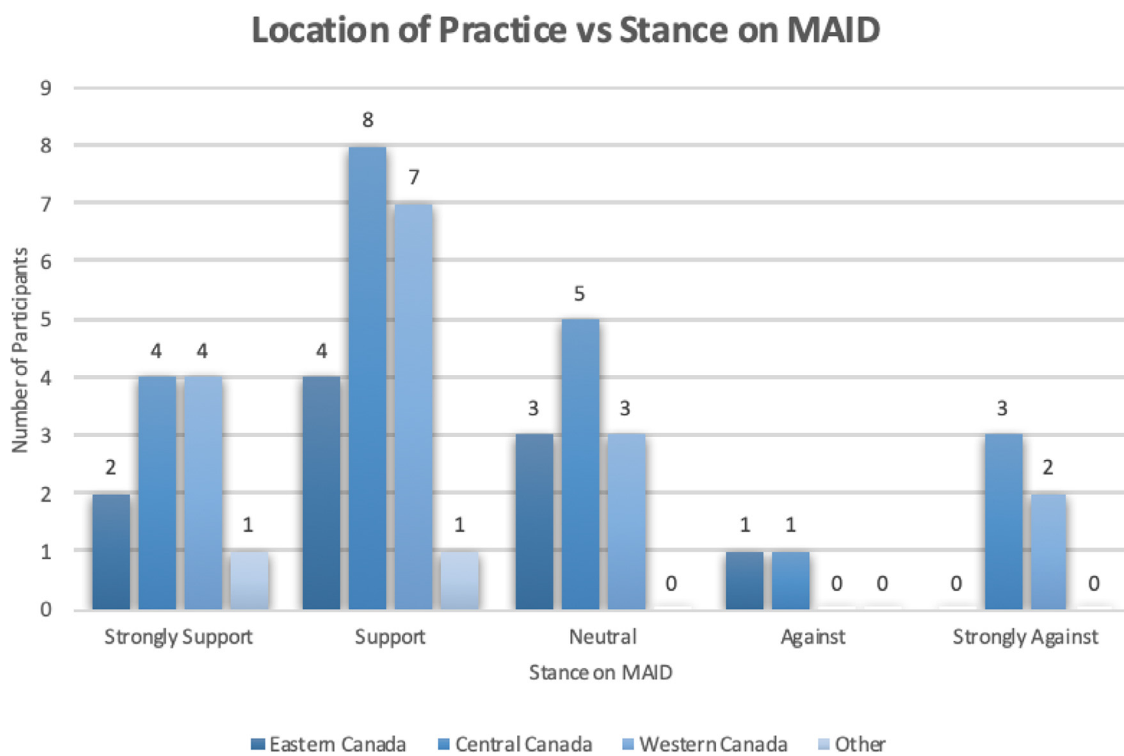

Fig. A.3. Location of Practice vs Stance on MAID.

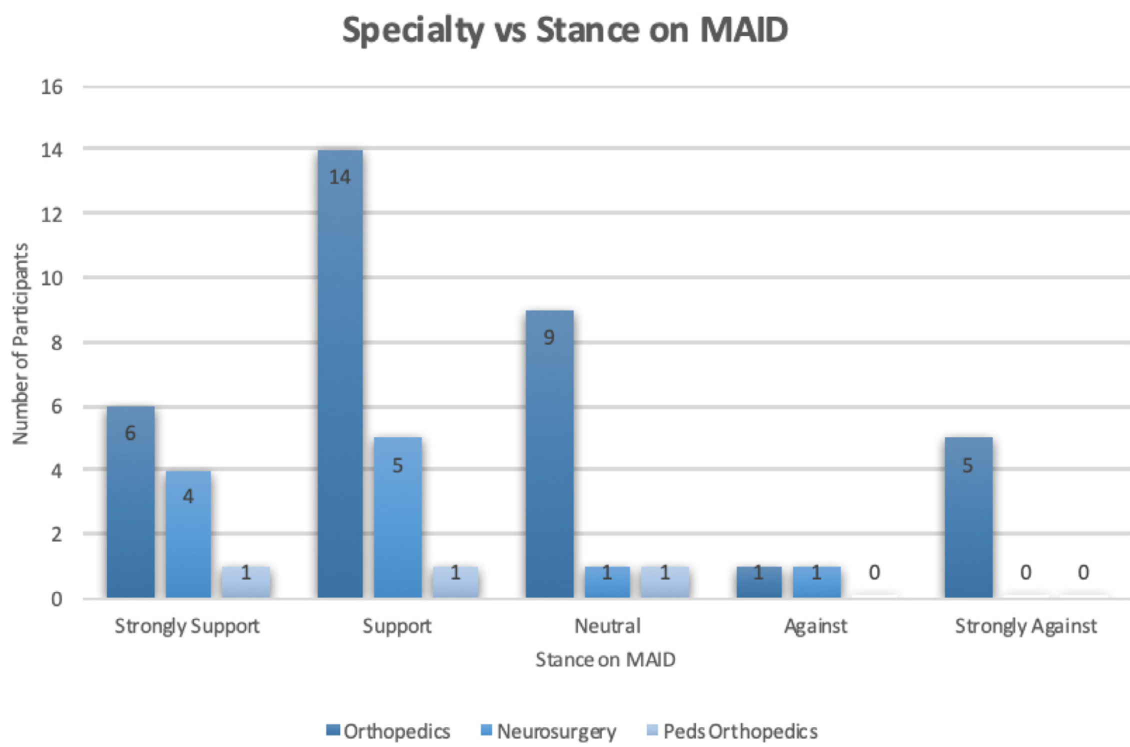

Fig. A.4. Specialty vs Stance on MAID.

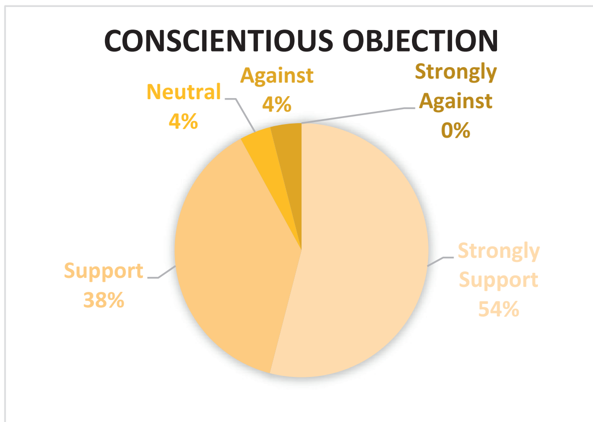

Fig. A.5. Conscientious objection.

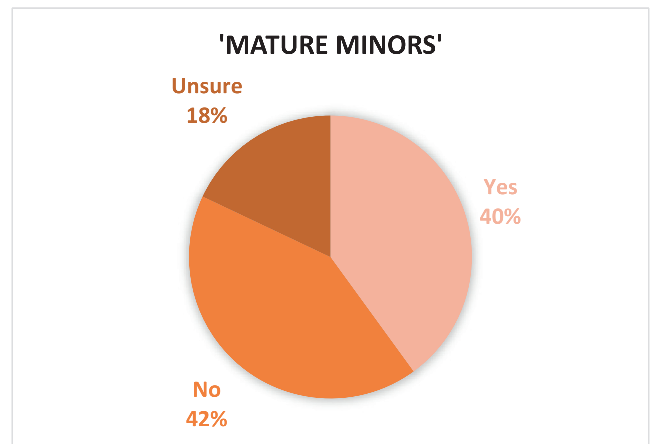

Fig. A.8. 'mature Minors'.

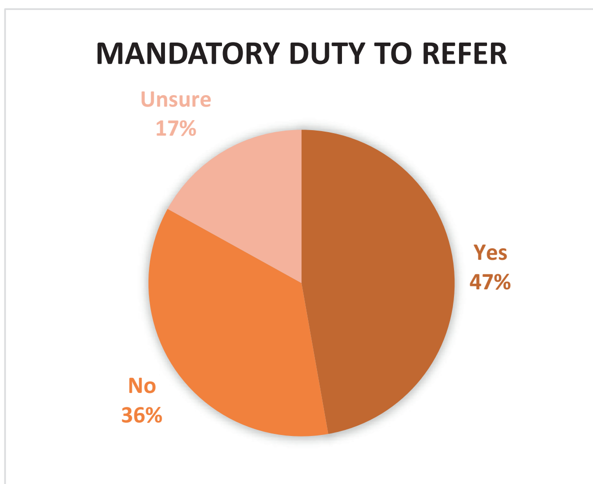

Fig. A.6. Mandatory duty to refer.

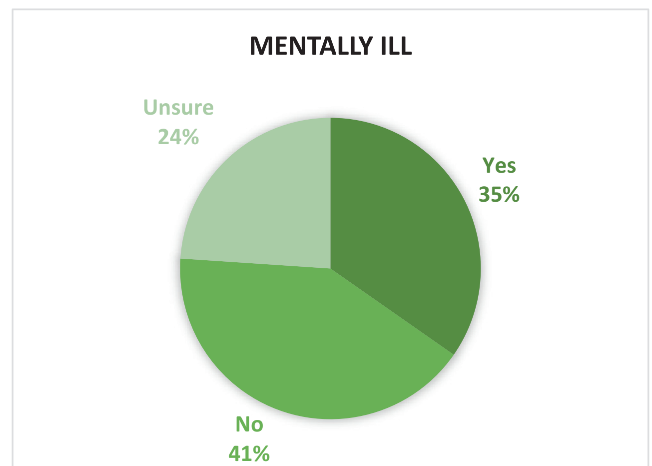

Fig. A.9. Mentallyill.

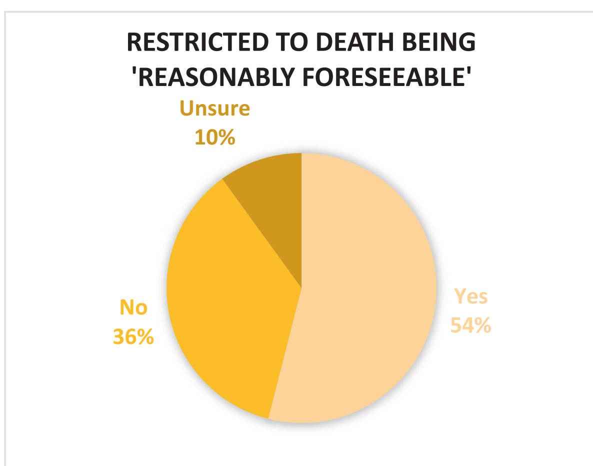

Fig. A.7. Restricted to death being 'reasonable foreseeable'.

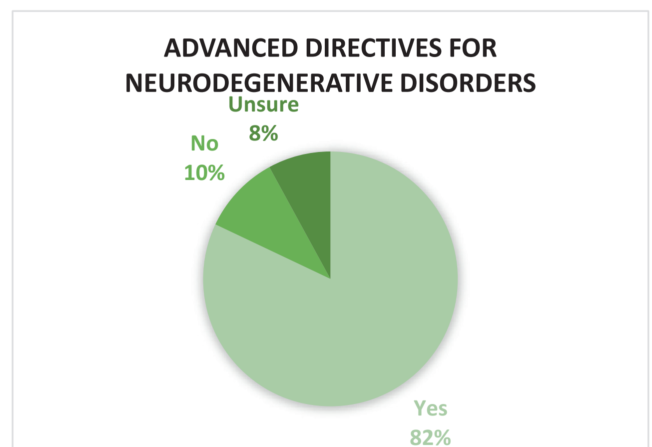

Fig. A.10. Advanced directives for neurodegenerative disorders.

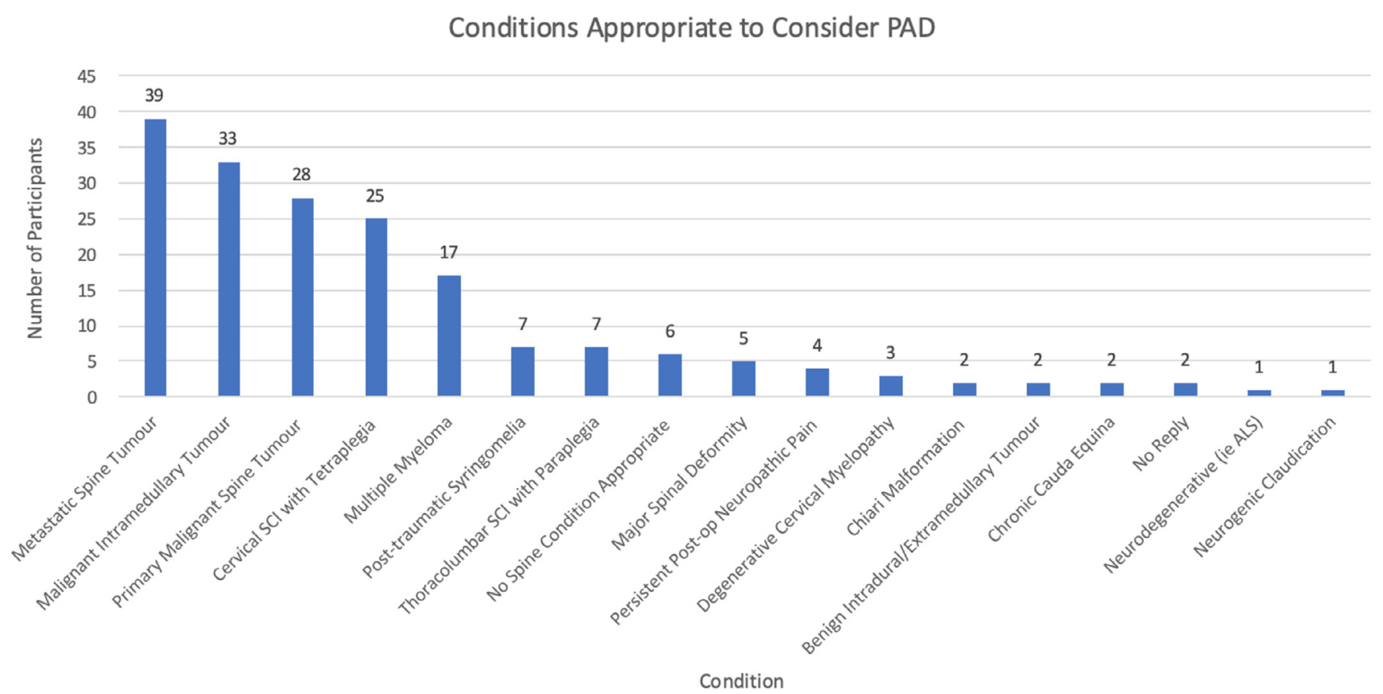

Fig. A.11. Condition Appropriate to consider PAD.

References

[1] Carter v. Canada, 2015 [SCC 5, 2015] 1 SCR 331, https://scc-csc.lexum.com/scc-csc/scc-csc/en/item/14637/index.do>; 2015 [accessed online September 29, 2020] [Carter].

[2] Department of Justice, Canada. Legislative background: medical assistance in dying (Bill C-14, as Assented to on June 17, 2016), https://www.justice.gc.ca/eng/rp-pr/other-autre/adra-amsr/; 2016 [accessed online September 29, 2020].

[3] Statues of Canada 2016, Chapter 3, An Act to amend the Criminal Code and to make related amendments to other Acts (medical assistance in dying), assented to July 17, 2016, https://laws-lois.justice.gc.ca/PDF/2016_3.pdf; 2016 [accessed online September 29, 2020] [Bill C-14].

[4] Dying with Dignity. Get the Facts: Bill C-14 and Assisted Dying Law in Canada, http://www.dyingwithdignity.ca/get_the_facts_assisted_dying_law_in_canada; 2016 [accessed online September 29, 2020] .

[5] Government of Canada. Medical assistance in dying, https://www.canada.ca/en/health-canada/services/medical-assistance-dying.html; 2020 [accessed online September 20, 2020] [Medical Assistance in Dying].

[6] Government of Canada. Provincial and territorial contact information for end-of-life care services, https://www.canada.ca/en/health-canada/services/provincial-territorial-contact-information-links-end-life-care.html; 2018 [accessed online September 29, 2020].

[7] Barry S, Ekong C, Wheelock B, Moulton R, Gorman P, Reddy K, et al. (2017), Medical Assistance in Dying (MAID) and the neurosurgeon: position statement of the canadian neurosurgical society (CNSS). Can J Neurol Sci 2017;44(6):744–6. https://www.ncbi.nlm.nih.gov/pubmed/28803572 [CNSS Position Paper]. doi:10.1017/cjn.2017.51.

[8] Canadian Council of Academics. The state of knowledge on medical assistance in dying for mature minors; the state of knowledge on advance requests for medical assistance in dying; and the state of knowledge on medical assistance in dying where a mental disorder is the sole underlying medical condition, https://cca-reports.ca/reports/medical-assistance-in-dying/; 2018 [accessed online September 29, 2020] [*CCA Reports*].

[9] Government of Canada. Medical assistance in dying, Canadian Government's First (April 26, 2017), Second (October 6, 2017) and Third (June 21, 2018) Interim Reports, https://www.canada.ca/en/health-canada/services/medical-assistance-dying.html; 2020 [accessed online September 20, 2020] [Medical Assistance in Dying].

[10] See online example at https://survey.nshealth.ca.

[11] Althagafi A, Ekong C, Wheelock BW, Moulton R, Gorman P, Reddy K, et al. Canadian neurosurgeons' views on medical assistance in dying (MAID): a cross-sectional survey of Canadian Neurosurgical Society (CNSS) Members. J Med Ethics 2019;45(5):309–13. Epub 2019 Mar 12 https://jme.bmj.com/content/early/2019/03/12/medethics-2018-105160.info?versioned=true . doi:10.1136/medethics-2018-105160.

[12] Government of Canada, Interim update on medical assistance in dying in Canada June 17 to December 31, 2016; 2017 https://www.canada.ca/en/health-canada/services/publications/health-system-services/medical-assistance-dying-interim-report-dec-2016.html#a3 [accessed online September 29, 2020].

[13] Government of Canada, Third interim report on medical assistance in dying in Canada; 2018 https://www.canada.ca/en/health-canada/services/publications/health-system-services/medical-assistance-dying-interim-report-june-2018.html [accessed online September 29, 2020].

[14] Nuhn A, Holmes S, Kelly M, Just A, Shaw J, Wiebe E. Experiences and perspectives of people who pursued medical assistance in dying; qualitative study in Vancouver, BC. Can Fam Phys 2018;64(9):380–6. available online at https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6135118/ [accessed online September 29, 2020].

[15] Holmes S, Wiebe E, Shaw J, Nuhn A, Just A, Kelly M. Exploring the experience of supporting a loved one through a medically assisted death in Canada. Can Fam Phys 2018;64(9). 387-39 https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6135137/ [accessed online September 29, 2020].

[16] Knoshnood N, Hopwood MC, Lokuge B, Kurahashi A, Tobin A, Isenberg S, et al. Exploring Canadian physicians' experiences providing medical assistance in dying: a qualitative study. J Pain Sympt Manag 2018;56(2):222–9. https://www.ncbi.nlm.nih.gov/pubmed/29775692 [accessed September 29, 2020].

[17] Piquard A. Public Health Reporter, CMA poll finds rising support for medically assisted death. Globe and Mail News; 2017. published on August 23 https://www.theglobeandmail.com/news/national/cma-poll-finds-rising-support-for-medically-assisted-death/article36074165/ .

[18] Health Law Institute, Dalhousie University, Recent developments: end-of-life law and policy in Canada; 2018 http://eol.law.dal.ca/?page_id=2142.