



MAID ready for primetime?: A survey of SGO members regarding medical aid in dying (MAID)

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ABSTRACT

Objectives: To assess SGO members' knowledge, attitudes, and practice patterns regarding Medical Aid In Dying (MAID).

Methods: SGO members were surveyed via online survey. The survey included questions regarding demographics, knowledge, attitudes, and practice patterns relating to MAID. Descriptive statistics were calculated. Associations between sociodemographic factors and attitudes related to MAID were analyzed utilizing logistic regression.

Results: Of 1,337 invited members, 225 (17%) responded. Median age was 46. Most were female (58%), white (81%), and in academic practice (64%). Over 50% had heard the term MAID and have had a patient ask about it. Few (20%) reported living in a state where MAID is legal and 61% of these respondents provided MAID. Sixty percent lived in a state that had not legalized MAID and 18% did not know if MAID was legal in their state. 36% of respondents living in a state where MAID was illegal/unknown legality indicated they would provide MAID if it were legal in their state, 30% would not, and 34% were uncertain. The majority (69%) of respondents believed MAID should be legal. Female respondents were more likely to support legalization of MAID (OR 2.44, $p < 0.05$). Respondents practicing in the southern U.S. were less likely to support legalization of MAID (OR 0.42, $p < 0.05$). Over 75% of respondents stated an SGO position statement on MAID would be helpful.

Conclusions: MAID is a highly relevant topic for gynecologic oncologists. Gaps in MAID-related knowledge exist among SGO members and there is a desire for additional education and guidance regarding MAID.

1. Introduction

Gynecologic oncologists have the unique privilege of providing both surgical and medical oncology care for patients with gynecologic malignancies. As a result, gynecologic oncologists often provide care for their patients from the time of initial diagnosis until the time of death and often must engage in conversations regarding complex medical and ethical issues. One such issue is Medical Aid in Dying (MAID). While the exact definition may vary, generally MAID falls within a category of care at the end of life that allows a patient, with the assistance of her physician, to make the decision regarding whether she wants to use lethal medication to end her life (Mroz et al., 2020; Emanuel et al., 2016). Other terms used in discussions surrounding this issue include

Physician Assisted Suicide (PAS) and euthanasia (Emanuel et al., 2016).

PAS is often used interchangeably with MAID and classically implies a passive role by the physician (i.e. providing a prescription for a life ending medication to the patient that the patient may take at a later time) (Mroz et al., 2020). Within the US medical community, there has been a trend toward using the term MAID rather than the more historical term, PAS, given the inherent negative associations with the term suicide (Mroz et al., 2020). Euthanasia is another term used to describe administration of a lethal medication at the end of life. Unlike MAID/PAS, the term euthanasia implies an active role by the physician (i.e. directly administering a life ending medication) (Mroz et al., 2020; Emanuel et al., 2016). Euthanasia is not considered ethical within the United States. The legality surrounding PAS, MAID, and euthanasia

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varies from country to country and is inherently tinted by the social and religious norms of each country.

Within the U.S., legalized physician involvement in providing life ending medications to patients is a relatively new practice. The Supreme Court ruled on two different cases in 1997 that ultimately left the decision regarding the legality of MAID up to each state (Mariner, 1997). Since that time, nine states (California, Colorado, Hawaii, Montana, Maine, New Jersey, Oregon, Vermont, Washington) and the District of Columbia have legalized MAID and sixteen additional states are considering legalizing it. With the exception of Montana, all government sanctioned MAID protocols within the US require that a patient be at least 18 years of age, have a terminal condition, require peer consultation with another physician separate from the one prescribing the medication, and have a waiting period prior to dispensing the medication (Mroz et al., 2020).

Globally, a common reason for a patient to request MAID is a terminal cancer diagnosis (Emanuel et al., 2016; Al Rabadi, 2019). This request is not usually motivated by uncontrolled pain or symptoms related to the patient's terminal illness (Emanuel et al., 2016). Instead, the request is often prompted by a patient's desire to maintain control over her overall quality of life, dignity, and autonomy as it relates to the final days of her life (Emanuel et al., 2016; Al Rabadi, 2019). Limited information has been published regarding the use of MAID among gynecologic oncology patients (Miller and Nevadunsky, 2018). Accordingly, there is a significant lack of information and guidance for Society of Gynecologic Oncology (SGO) members regarding this topic. The purpose of this study was to assess SGO members' knowledge, attitudes, and practice patterns regarding MAID in order to identify ways to best aid gynecologic oncologists in approaching this topic.

2. Methods

2.1. Study design

This study was an Institutional Review Board (IRB) approved online survey of SGO members regarding issues surrounding MAID. This was a joint project of the SGO Ethics Committee and Palliative Care Committee. By completing the online survey, participants consented to be in the study.

SGO members categorized as full member gynecologic oncologists were identified using the SGO email mailing list. Eligible members were sent an anonymous electronic survey via RedCap. The survey included 22 questions regarding demographics, knowledge, attitudes, and practice patterns relating to MAID and took approximately 5–10 min to complete. Questions followed a branching logic pattern that took into account whether or not MAID was legal in the respondent's state or if the respondent would consider providing MAID if it became legal in their state. See Supplementary Table 1 for full survey. Potential participants received up to two email reminders to complete the survey.

2.2. Data collection and analysis

Study data were collected and managed using REDCap electronic data capture tools hosted at Vanderbilt University Medical Center (Harris et al., 2009; Harris, 2019). REDCap (Research Electronic Data Capture) is a secure, web-based software platform designed to support data capture for research studies, providing 1) an intuitive interface for validated data capture; 2) audit trails for tracking data manipulation and export procedures; 3) automated export procedures for seamless data downloads to common statistical packages; and 4) procedures for data integration and interoperability with external sources.

IBM SPSS Statistics version 27 was used for statistical analysis. Descriptive statistics were calculated. Associations between socio-demographic factors and attitudes related to MAID were analyzed utilizing logistic regression. One logistic regression was completed among physicians that practice in states where MAID was legal with a

Table 1
Demographics N = 225.

Age*	Mean (SD)	48 years old	
	Median	46 years old	
	Min-Max	33-80 years old	
		N	%
Race	White	182	81%
	Black	5	2%
	Asian	25	11%
	Multiracial	3	1%
	Other	3	1%
	Not Answered	7	3%
Gender	Male	90	40%
	Female	130	58%
	Not Answered	5	2%
Type of Practice	Academic Practice	144	64%
	Private Practice	34	15%
	Mixed (Academic/Private) Practice	41	18%
	Not Answered	6	3%
Practice Setting	Urban	144	64%
	Suburban	63	28%
	Rural	13	6%
	Not Answered	5	2%
Practice Location	Northeast US	54	24%
	Midwest US	49	22%
	Southeast US	48	21%
	Southwest US	25	11%
	Western US	32	14%
	Other	12	5%
	Not answered	5	2%
	How Long in Practice Since Completed Fellowship	<5 years	52
5-10 years	49	22%	
11-15 years	34	15%	
16-20 years	25	11%	
> 20 years	59	26%	
No answer	6	3%	

* N for age = 217 respondents (8 did not answer)

dependent variable of yes/no if they provide MAID; covariates of age, white yes vs no, gender, academic yes vs no, practice in southern U.S. yes vs no. Another logistic regression was completed among all those surveyed that answered yes vs no to the question if MAID should be legal with dependent variable of yes/no if MAID should be legal; covariates of age, white yes vs no, gender, academic yes vs no, practice in southern U.S. yes vs no.

3. Results

There were 1,337 email surveys sent. Two-hundred and twenty-five eligible participants responded to the survey (response rate of 17%). This response rate is appropriate for this type of survey (expected response rate 18–20%) (VanGeest et al., 2007). The median age was 46 years old and the majority of respondents were white (81%), female (58%), and in academic practice (64%) (Table 1).

The majority of those surveyed had heard of the term MAID (N = 122, 54%). A more significant majority had heard the term PAS (N = 218, 97%). Only 20% of respondents self-reported living in a state that legalized MAID (N = 44). Sixty percent (N = 135) responded that they did not live in a state that legalized MAID and 18% (N = 41) did not know if they lived in a state that legalized MAID.

Among those forty-four respondents who lived in states where MAID was legal, 61% (N = 27) stated that they provide MAID to their patients. Thirty-two percent (N = 14) did not and 7% (N = 3) did not answer. Main reasons for not providing MAID in a state where it was legal included ethical and religious concerns (50%) and limited knowledge on the topic (36%) (Table 2).

Among those 166 who lived in states where MAID was not legal or the respondent was unsure if it was legal, 36% (N = 63) stated that they

Table 2
Reasons for not providing MAID among those that do not/would not*

	Those that live in states where MAID is legal but do not provide MAID (Total N = 14)*	Those that live in states where MAID is not legal/respondent is unsure if MAID is legal but would not provide MAID (Total N = 52)*
	N (%)	N(%)
Ethical concerns	3 (21%)	41 (79%)
Religious concerns	4 (29%)	33 (64%)
Concern for litigation	1 (7%)	10 (19%)
Time considerations	3 (21%)	9 (17%)
Limited knowledge regarding MAID	5 (36%)	13 (25%)
Concern for professional reputation	0 (0%)	12 (23%)
Healthcare system prohibits it	0 (0%)	10 (19%)
Other	4 (29%)	6 (12%)

* More than one reason could be selected

would provide MAID to their patients. Thirty percent (N = 52) would not provide MAID, 34% (N = 60) did not know if they would provide it, and 1% (N = 1) did not answer. Main reasons for not providing MAID in a state where it was not legal or the respondent was unsure if it was legal included ethical concerns (79%), religious concerns (64%), and limited knowledge on the topic (25%) (Table 2). Among those who were unsure if they would provide MAID if legal in their state, reasons for reservation included limited knowledge on the topic (72%), ethical concerns (68%), and concern for litigation (57%). (Table 3). Additionally, many respondents in this group commented that they felt that MAID was best handled by palliative care providers.

The entire study population was asked several general questions regarding MAID in order to better understand how SGO members may encounter MAID in clinical situations. The majority of those surveyed (57%, N = 129) have had a patient ask about MAID and would find an SGO position statement on MAID to be helpful (75%, N = 169). When asked if MAID should be legal in all states, 69% (N = 155) believed it should be legal, 13% (N = 29) did not believe it should be legal, 16% (N = 36) did not know if it should be legal, and 2% (N = 5) did not answer. Among those who did not believe MAID should be legal, main reasons for this position included personal/religious reasons (93%), concern for increasing disparities (66%), concern for further mandates for physicians to provide MAID regardless of conscience (66%), and concern for broadening criteria to include patients not in the last 6 months of life or who do not have traditional terminal conditions (48%) (Table 4).

Table 3
Reasons respondents unsure if they would provide MAID if legal in their state*

	Those that live in states that MAID is not legal/respondent is unsure if MAID is legal but unsure if would provide MAID (Total N = 60)*
	N(%)
Ethical concerns	41 (68%)
Religious concerns	11 (18%)
Concern for litigation	34 (57%)
Time considerations	24 (40%)
Limited knowledge regarding MAID	43 (72%)
Concern for professional reputation	19 (32%)
Healthcare system prohibits it	10 (17%)
Other	2 (3%)

* More than one reason could be selected

Table 4
Reasons respondents thought MAID should not be legal or unsure if it should be legal**

	Reasons MAID should not be legal (Total N = 29)*	Reasons unsure if MAID should be legal (Total N = 36)*
	N (%)	N(%)
Personal/religious reasons	27 (93%)	24 (67%)
Concern for increasing disparities	19 (66%)	26 (72%)
Future mandates for providers to provide MAID regardless of conscience	19 (66%)	17 (47%)
Time considerations	2 (7%)	11 (31%)
Broadening criteria to include patients not in the last 6 months of life or who do not have traditional terminal conditions	14 (48%)	21 (58%)
Denial of expensive lifesaving treatments by insurance in favor of less expensive MAID	13 (45%)	18 (50%)
Other	3 (10%)	4 (11%)

* More than one reason could be selected

Among those unsure if MAID should be legal, concerns regarding legality included concern for increasing disparities (72%), personal/religious reasons (67%), and concern for broadening criteria to include patients not in the last 6 months of life or who do not have traditional terminal conditions (58%) (Table 4).

In evaluating predictors of providing MAID, physicians in academic institutions were more likely to provide MAID (OR 5.8, $p = 0.032$). There was a trend toward older physicians being less likely to provide MAID (OR 0.93, $p = 0.084$).

In evaluating predictors of believing that MAID should be legal, physicians practicing in the southern U.S. were less likely to think MAID should be legal (OR 0.42, $p = 0.046$). Female physicians more likely to think MAID should be legal (OR 2.44, $p = 0.048$).

4. Discussion:

MAID is an important topic for gynecologic oncologists and their patients. A significant majority of those surveyed have encountered MAID related patient care issues and would like input from SGO regarding the management of this complex issue. Additionally, we found that support exists among gynecologic oncologists for legalizing and providing MAID more broadly. However, major educational, cultural, and policy barriers remain before wider implementation of MAID can be considered. The survey also shows that gaps in MAID-related knowledge exist among SGO members and that there is a desire for additional education and guidance regarding MAID, suggesting that there is significant opportunity for member education initiatives regarding this important topic.

Our survey highlights that MAID remains an ethically and religiously complex issue that is inherently emotionally charged and sensitive. It is important to note that those who stated they did not or would not provide MAID often listed ethical/religious concerns surrounding this decision. Those who were unsure if they would provide MAID listed other issues such as a lack of knowledge or time considerations as barriers to providing MAID. This highlights the fact that those who are generally strictly opposed to providing MAID are often motivated by ethical/religious concerns whereas those unsure regarding MAID are more likely to be influenced by non-ethical/religious concerns. Physician demographics also played a role in a respondent's willingness to provide MAID and thoughts about whether MAID should be legal, highlighting the impact that cultural and societal norms play on an individual physician's opinions regarding this topic.

The majority of surveyed members stated that an SGO position statement on the topic of MAID would be beneficial. Several other organizations such as the American Medical Association (AMA), the

American Academy of Hospice and Palliative Medicine (AAHPM), and the American College of Obstetricians and Gynecologists (ACOG) have published position statements on this topic (Barsness et al., 2020).

The AMA is opposed to MAID/PAS (Barsness et al., 2020; Association, xxxx). The AMA statement on MAID/PAS acknowledges that this is a challenging topic for physicians because both opponents and proponents of MAID/PAS desire to take the best possible care of their patients, to preserve a dying patient's dignity, and to respect patients' wishes. The differences in how this action is perceived by the individual physician is completely dependent on their own ethical interpretation of the issue (Association, xxxx). The AMA describes this as "irreducibly different judgments about what is an ethically permissible course of action" and recognizes that physicians will be extremely unlikely to agree on this issue. As a result, individual physicians may act according to their conscience and applicable law. Interestingly, the AMA makes a conscious effort to label the practice of a physician prescribing a life ending medications as PAS, forgoing the term MAID. The AMA states that it does this because it believes "ethical deliberation and debate is best served by using plainly descriptive language" (Association, xxxx). In the AMA's view, despite its negative connotations, the term "physician assisted suicide" describes the practice with the greatest precision. Most importantly, it clearly distinguishes the practice from euthanasia. Per the AMA, "the terms "aid in dying" or "death with dignity" could be used to describe either euthanasia or palliative/hospice care at the end of life and this degree of ambiguity is unacceptable for providing ethical guidance" (Association, xxxx).

The AAHPM takes a position of "studied neutrality" (Medicine, xxxx). As a result, the AAHPM is technically considered neutral on the topic of MAID/PAS. Similar to the AMA, the AAHPM acknowledges that this is a challenging topic for physicians to agree on due to the inherent ethical and religious concerns that physicians have regarding this issue. While attempting to maintain neutrality, the AAHPM states that "the ending of suffering by ending life has been held as distinct from palliative care, which relieves suffering without intentionally hastening death" (Medicine, xxxx). In making this statement, the AAHPM separates the practice of palliative care from the administration of MAID/PAS. The AAHPM also raises concerns regarding the possible unintended negative impact that MAID may have on medical care in general and on the patient/physician relationship. Accordingly, the AAHPM used its position statement to attempt to provide clear statements regarding how to protect patients and physicians as they navigate the ethical questions that may arise during conversations and decisions regarding MAID.

Unlike the AMA or AAHPM, ACOG did not take a formal position within its opinion statement. Instead, ACOG used its opinion statement to acknowledge the challenges inherent in discussions surrounding MAID and to offer support to physicians during these difficult patient scenarios. ACOG states that "physicians should be true to their own values as well, never ceasing to acknowledge the dignity of the dying patient and provide support to her and her loved ones, but asking other colleagues to step in when the situation warrants" ("Committee opinion, 2015).

The SGO has not yet published a position statement but should consider developing a statement to serve the needs of members identified in our survey. If the SGO considers developing a statement regarding MAID, it is important that it notes the wide variety of valid differences in opinions expressed by the membership. As highlighted by other groups that have made statements regarding this topic, MAID is an extremely controversial issue with a variety of valid possible opinions and positions. We encourage the SGO to use its platform to bridge knowledge gaps and educate members on MAID while recognizing the legitimacy of the range of personal opinions held by members on this complex issue.

This is the first known survey of gynecologic oncologists regarding MAID. As such, it provides unique insight and perspective into the challenges and difficulties gynecologic oncologists may face when interacting with patients regarding this sensitive topic. The current

study was limited by the response rate and the fact that it was a self-reported survey. Our response rate of 17% is expected for a survey of physicians that did not offer incentives to complete the survey (on average this type of study can expect around 18–20% response rate) (VanGeest et al., 2007). Unfortunately, due to the low percentage of SGO members who were surveyed, our data may not represent the opinions of SGO membership as a whole. Additionally, there was likely some inherent self-selection bias within this study since those more interested in the topic were more likely to have completed the survey. Lastly, our survey was limited by the lack of diversity within our population. Among those surveyed, the majority were female (58%) and white (81%). While this is similar to the demographics of the recent SGO 2020 State of the Society Survey (54% female, 70% white), there is significant work to be done regarding enhancing diversity and representation within our specialty.

Gynecologic oncologists frequently face challenging medical and ethical issues during the care of our patients. We serve as advocates for patients transitioning to the end of life. Our survey reinforced the important role that gynecologic oncologists play at the end of their patients' lives and demonstrated that SGO members are interested in difficult end of life care topics such as MAID. The SGO is in a unique position to provide education and guidance regarding challenging topics such as MAID and should continue to work toward developing opportunities for member education on this issue.

Author Contributions:

- Alaina Brown, MD, MPH: Involved in conception and design of the project, collected and reviewed data; completed statistical analysis; drafted and revised the manuscript; approved the final manuscript.
- Nefertiti duPont, MD: Involved in conception and design of the project; drafted and revised the manuscript; approved the final manuscript.
- Ronald Alvarez, MD, MBA: Involved in conception and design of the project; drafted and revised the manuscript; approved the final manuscript.
- Monique Spillman, MD: Involved in conception and design of the project; drafted and revised the manuscript; approved the final manuscript.
- Lisa Landrum, MD: Involved in conception and design of the project; drafted and revised the manuscript; approved the final manuscript.
- Carolyn Lefkowitz, MD: Involved in conception and design of the project; drafted and revised the manuscript; approved the final manuscript.

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Alaina J. Brown: Conceptualization, Data curation, Formal analysis, Methodology, Project administration, Supervision, Validation, Visualization, Writing - original draft, Writing - review & editing. **Nefertiti duPont:** Conceptualization, Methodology, Writing - original draft, Writing - review & editing. **Ronald D. Alvarez:** Conceptualization, Methodology, Supervision, Writing - original draft, Writing - review & editing. **Monique A. Spillman:** Conceptualization, Methodology, Supervision, Writing - original draft, Writing - review & editing. **Lisa Landrum:** Conceptualization, Methodology, Writing - original draft, Writing - review & editing. **Carolyn Lefkowitz:** Conceptualization, Methodology, Supervision, Writing - original draft, Writing - review & editing.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Appendix A. Supplementary material

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.gore.2021.100829>.

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