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Original Research Article

"We're called upon to be nonjudgmental": A qualitative exploration of United States medical students' discussions of abortion as a reflection of their professionalism

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ABSTRACT

Objectives: Medical educators may assess learners' professionalism through clinical scenarios eliciting value conflicts – situations in which an individual's values differ from others' perceived values. We examined the extent to which United States (US) medical students' discussion of abortion highlights their professionalism according to the 6 American Association of Medical Colleges (AAMC) professionalism competencies.

Study design: We conducted anonymous, semistructured qualitative interviews with 74 US medical students applying to OB/GYN residency. Interviews explored attitudes toward abortion and abortion case vignettes. We analyzed interview transcripts using directed content analysis for alignment with the AAMC professionalism competencies: humanism, patient needs superseding self-interest, patient autonomy, physician accountability, sensitivity to diverse populations, and commitment to ethical principles.

Results: Students' genders, races, religions, and geographic regions were diverse. Attitudes toward abortion varied, but all students commented on themes related to at least 1 AAMC professionalism competency when discussing abortion care. Statements demonstrating students' humanism, prioritization of patient autonomy, and sense of physician accountability were common. Most comments reflected positive professionalism practices, regardless of personal views on abortion or provision intentions; very few students made statements that were not aligned with the AAMC professionalism competencies.

Conclusions: All students in this study exhibited professionalism when discussing abortion, regardless of personal views on abortion or intention to provide this care. Case-based discussions involving abortion could be used to explore professionalism competencies among medical learners.

Implications: Discussing abortion has the potential to elicit values conflict, which enables learners to exhibit professionalism. Case-based abortion education should be included in medical school curricula to measure medical professionalism in future physicians, and to serve as a tool for teaching professionalism in medical school.

1. Introduction

Patients and physician-accrediting bodies (e.g., the American Association of Medical Colleges (AAMC)) expect high standards of professionalism from doctors. The Liaison Committee on Medical Education (LCME) requires medical schools to detail their methods for developing, assessing, and remediating professional attributes in their students [1], and the AAMC delineates 6 professionalism competencies that medical students must demonstrate prior to entering residency: humanism, patient needs superseding self-interest, patient autonomy, physician accountability, sensitivity to

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1) Compassion, integrity and respect for others ('humanism')

2) Responsiveness to patient needs that supersedes self-interest ('patient needs superseding self-interest')

3) Respect for patient privacy and autonomy ('patient autonomy')

4) Accountability to patients, society, and the profession ('physician accountability')

5) Sensitivity and responsiveness to a diverse patient population, including but not limited to diversity in gender, age, culture, race, religion, disabilities, and sexual orientation ('sensitivity to diverse populations')

6) Commitment to ethical principles pertaining to provision or withholding of care, confidentiality, informed consent, and business practices, including compliance with relevant laws, policies, and regulations ('commitment to ethical principles')

Fig. 1. AAMC Professionalism Competencies as of 2016. Each competency is followed by the abbreviated term used when discussing it in the text, in parentheses.

diverse populations, and commitment to ethical principles (Fig. 1) [2].

Despite widespread recognition of the importance of professionalism [3,4], methods of teaching and evaluating professionalism in medical education vary and are often not evidence-based [3–8]. According to meta-analyses, probing students' attitudes, particularly through case vignettes involving value conflicts, provides the most accurate assessment of medical students' professionalism [9,10]. Value conflicts—clinical scenarios in which an individual's values in different domains conflict with one another, or differ from colleagues', patients', or society's perceived values—can make an individual's values explicit [10,11].

Abortion may be an ideal topic to explore students' professionalism given its potential to introduce value conflicts within individual learners [12]. Abortion values clarification workshops help medical professionals identify their own core values and recognize when these values conflict with others' or with their patient care responsibilities [11]. Similarly, conversations about abortion enable students to consider situations in which their values may differ from their patients' and/or challenge their ability to meet professional obligations to patients, thus facilitating reflection on how they might act and potentially resolve conflicts [11,12].

We hypothesized that when asked questions exploring attitudes toward abortion and case vignettes about abortion, medical students' answers would underscore their professionalism traits. In this study, we investigate how students' discussion of abortion in semistructured interviews provides evidence of their personal professionalism within the AAMC-defined professionalism competencies.

2. Methods

2.1. Recruitment

We sampled US fourth-year medical students who had applied to but not yet matched into obstetrics and gynecology (OB/GYN) residencies over 2 academic years (2012–2014). We chose this population because these students would potentially have exposure to abortion care during medical school and would later face opportunities to participate in abortion care as part of their residency training.

We recruited from an AAMC-maintained database of US medical schools [13]. To intentionally sample a variety of students with potentially diverse attitudes toward abortion and abortion training experiences, we created a matrix based on 3 criteria potentially affecting abortion training perspectives. We sampled by gender because women OB/GYN physicians are significantly more likely to provide abortions than men [14], by medical school geographic region because the number of abortion facilities per capita has been shown to vary by region [15], and by presence or lack of a Ryan Residency Training Program in Abortion and Family Planning [16] within medical schools' teaching hospitals because we hypothesized that departments with Ryan Programs might more commonly educate medical students about abortion care (although more recent research has suggested that there is no significant difference in abortion-related knowledge, attitudes or exposure between medical students completing clerkships at sites with and without a Ryan Residency Program [17]). We desired 80 total students, 70% of whom would identify as women, 50% of whom would train at a teaching hospital with a Ryan Program, and 25% of whom would be from each of the 4 AAMC geographic regions [13] (Northeast, South, Central, West).

We sent recruitment emails to all OB/GYN Clerkship Directors and Managers, asking them to forward the recruitment materials directly to students who had applied to OB/GYN residencies. To avoid biasing respondents or clerkship directors/managers' choice of students, we described the study objectives in the recruitment email as "to explore prior OB/GYN experience and plans for future practice." We did not require confirmation of email forwarding to improve ease of recruitment; therefore, we do not know how many students were sent recruitment materials. We enrolled students based on our sampling matrix until the predetermined enrollment caps were met in each cell of the matrix. The Partners Human Research Committee approved this study.

Table 1
Self-reported demographics and abortion attitudes of United States fourth year medical students in our study during 2012-2014 ($N = 74$)

Gender (*n*)		Age (years)	
Woman	56	Range	24–36
Man	18	Median	27
Ryan program status (n)		*Geographic region (n)*	
Ryan program present	42	Northeast	20
Ryan program absent	32	South	18
		Central	18
		West	18
Race (n)		*Religious affiliation (n)*	
Asian	11	Atheist/Agnostic	11
Black	7	Buddhist	1
Multiple Racial Categories	6	Catholic	8
White	45	Christian, non-Catholic	29
Other	4	Hindu	2
Declined to answer	1	Jewish	9
		Muslim	1
		None	12
		Declined to answer	1
Abortion Attitudes (scale answer) (n)		*Practice Intentions (n)*	
Favor universal access to abortion (10/10)	32	Provide abortions	47
Favor access to abortion in most cases (7–9/10)	29	Refer for abortions, but not provide	21
Favor abortion in restricted cases (4–6/10)	7	Neither provide nor refer	0
Favor abortion in few or no cases (0–3/10)	4	Undecided	6
Declined to answer	2		

Data are presented as numbers. Gender, age, race, and religious affiliation are all self-reported. Abortion attitudes are based on answers to our asking students to rate their level of support for abortion on a 10-point spectrum, with zero meaning against abortion in any circumstances, including settings of rape, incest, or risk of maternal death, and 10 meaning favoring universal access to abortion for any reason.

2.2. Interview procedures

Two doctorally-trained social scientists conducted 45- to 60-minute semistructured phone interviews with each enrolled participant about abortion attitudes and perceptions of abortion-related patient scenarios. Using a socioecological conceptual model [18], we developed an interview guide (Supplementary Document 1) to explore factors potentially affecting students' general attitudes toward abortion, desire for future abortion training, and understanding about their future patients' need for abortion care or referral. We made the interview prompts open-ended, allowing the respondents to partially guide the conversation. Recognizing that abortion attitudes are complex and often do not fall into binary categories [19], we asked students to rate their level of support for abortion on a numerical scale, with zero meaning against abortion in any circumstances, including settings of rape, incest, or risk of maternal death, and 10 meaning favoring universal access to abortion for any reason. We also asked students about their plans to provide and/or refer for abortion, and how they imagined they would act in several specific clinical vignettes involving abortion.

2.3. Data analysis

We recorded and transcribed phone interviews verbatim. We used directed content analysis, a technique to organize text into categories and themes using predetermined and open codes [20]. Directed content analysis starts with theory as guidance for identifying initial codes; we used the 6 AAMC professionalism competencies. One reviewer (AM) extracted professionalism-related quotations from all transcripts, and 2 reviewers (AM, MM) independently coded them according to the 6 AAMC professionalism competencies. We searched for meaningful patterns and exemplary quotations regarding the components of professionalism based on the analytical approaches of counting, contrast and comparison, partitioning, and subsuming, thus leading to rational discovery [21]. We resolved any uncertainty regarding categorization of quotations through development of consensus by 4 investigators (AM, MM, DB, EJ).

Table 2
Sample matrix used to enroll a sample of United States fourth year medical students with varying attitudes toward and exposure to abortion during 2012-2014

AAMC region	Ryan program present		No Ryan program present	
Northeast	7/7 woman	3/3 man	7/7 woman	3/3 man
South	7/7 woman	2/3 man	7/7 woman	2/3 man
West	7/7 woman	3/3 man	7/7 woman	0/3 man
Central	7/7 woman	3/3 man	7/7 woman	2/3 man

Our desired sample size was 80 total students, 70% of whom would identify as women, 50% of whom would be affiliated with a Ryan Program, and 25% of whom would be from each of the 4 geographic regions, leading to goal numbers in each cell above. We enrolled students based on our sampling matrix until the predetermined enrollment caps were met in each cell of the matrix. Numbers shown are number enrolled/goal number.

Below we describe the meaningful patterns that emerged with respect to the professionalism competencies. Each representative quotation is followed with, in parenthesis, the participant's gender, school geographic region, and answer to the abortion access scale question (0–10/10).

3. Results

3.1. Overview

We interviewed 74 students between October 2012 and March 2014 enrolled in 39 medical schools in 25 states and the District of Columbia. Demographic, religious and school characteristics, general abortion attitudes, and practice intentions of our sample appear in Table 1. We did not recruit our planned sample of 80 students due to few responses from eligible students in certain matrix strata (Table 2).

When discussing abortion, all students who answered the interview questions gave responses exhibiting professionalism within at least 1 of the 6 AAMC competencies. Table 3 lists illustrative quota-

Table 3
Fourth year United States medical student sample quotations illustrating professionalism tenets when discussing abortion during 2012–2014

Participant characteristics[a]	Support scale[b]	Basic attitude toward abortion provision	Competency(ies)	Illustrative quotation
Woman, 29, VA, Asian, Atheist, NE	10	"I am definitely going to be [an abortion] provider. I have already made that decision."	Humanism, Patient autonomy	"I want to treat patients with respect and compassion and understanding that you know this situation happens and things happen and you may not be ready to be a parent; they have other children at home, whatever the situation is, I just think whatever the situation is, they need to be treated with respect and I want to make sure that they know that it is ok."
Woman, 27, MD, African-American, Christian, S	10	"I would like to provide abortion."	Humanism, Patient needs over self-interest, Patient autonomy	"I think my beliefs towards that area and my religious beliefs contradict; however, I want to be a physician who is able to provide all the services a patient may need. It is not my choice to provide the service, but it is the patient's choice."
Woman, 29, NJ, White, Agnostic, S	10	"I want to be able to offer these services to women, but I can't say with a 100% that I am going to be emotionally and ethically okay with doing them myself because I haven't been put into that position yet."	Patient needs over self-interest, Physician accountability	"I feel a little uncomfortable [providing abortion] but…I feel like it is so important to the patient that you know what, you sacrifice and that is what you do in medicine, you are always self-sacrificing and even though it may be hard, I think it is worth it to be able to offer that service to women who need it."
Woman, 28, ID, Asian, None, W	8.5	"I would be willing to provide and refer."	Physician accountability	"I think the biggest thing for me was realizing that I can't control who is going to walk through my door, you know, down the road and in my own practice, and inevitably I think I can count on someone who will desire an abortion or someone who has had one done and perhaps had a complication from it and need management when I am on-call in the ER or something."
Woman, 26, MD, Caucasian, Catholic, S	5	"I think it is necessary that I receive training in it, but…I know that in my practice it is not something that I want to do."	Humanism, Patient autonomy	"As physicians, we're called to be nonjudgmental and to provide unbiased information and help patients make their own decisions, and I didn't want, I knew that if I wasn't able to do that as a physician then this was not the right field for me."
Woman, 27, IL, Black, non-Hispanic, Christian, C	3	"I don't foresee myself participating."	Patient needs over self-interest, Patient autonomy, Physician accountability	"I feel like as a physician, if you have a reason why you can't, a moral reason, religious or personal reason that you still owe the patient to provide the best care. Sometimes the referral is the best care. If it is something that I can't see myself doing because of moral reasoning or because of other reasons, I do see that it is my duty and obligation to first provide the necessary education or information like abortion and then provide them to the appropriate people who can take care of the person's needs, I don't see any sense to convince them otherwise out of it."
Woman, 24, NH, Indian, Hindu, NE	1	"I don't support induced abortion. I don't want to make it part of my practice."	Commitment to ethical principles	"I think there was never a question whether I would refer, if someone comes to me, I would refer because it is the law."

[a] Participant Characteristics: Gender, Age, Childhood State, Race/Ethnicity (as described by participant), Religion (as described by participant), School Region (Northeast (NE), South (S), Central (C), West (W)).
[b] Student answer to the abortion support scale question.

tions demonstrating professionalism competencies among students with varied levels of support for abortion. Students made comments reflecting the professionalism competencies in similar frequencies regardless of their general attitudes toward abortion and intention to provide abortion (Fig. 2).

3.2. Competency 1: Compassion, integrity, and respect for others ("humanism")

Many students emphasized the importance of treating patients seeking abortions respectfully. Students valued the opportunity to provide compassionate care and comfort to patients during what they perceived as a vulnerable time. One student described: "If we can provide the safe and compassionate care to women whatever their choices are and just be guided by that, then we are doing our job" (woman, West, 9.5/10). Students discussed that providers cannot always know their patients' motivations or understand their lives, and recognized this limitation as an additional reason to always treat patients with compassion and respect: "Abortion is not a black and white issue, there is a lot of gray area, and it is very important not to be judgmental with the decisions women make with regard to their bodies" (woman, Central, 5/10). Finally, several students anticipated that it could be difficult to respect patients' decisions when they felt that they personally would have acted differently; nonetheless, they viewed respecting patients as paramount. One student stated, "I will try my hardest not to pass that judgment onto them, not to let that judgment to come out... That is not my life, that is not my job" (woman, South, 9/10).

3.3. Competency 2: Patient needs superseding self-interest

Students emphasized the importance of patient welfare and how abortion may contribute to it, and specifically noted this was regardless of their attitude toward abortion or provision intentions. Many students prioritized putting their patients' wishes, interests, and well-being first and not allowing personal beliefs to impact

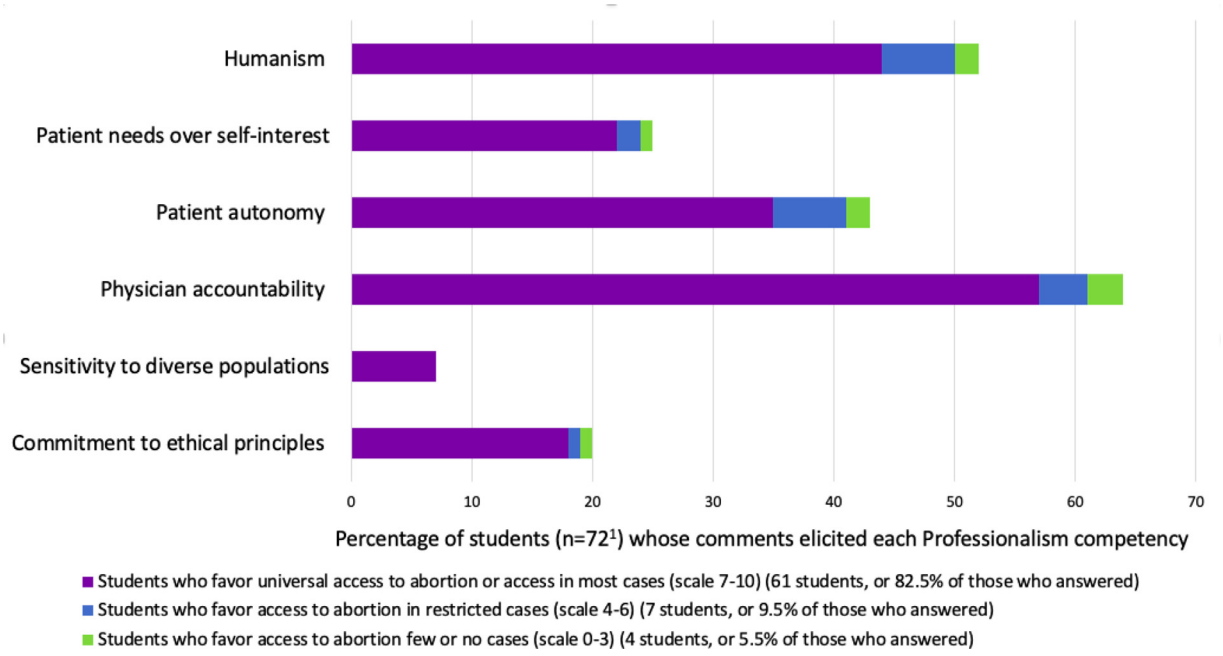

Fig. 2. Professionalism competencies exhibited in interviews of United States fourth year medical students about abortion during 2012–2014. [1]2 students (2.5%) declined to answer the abortion scale question and many interview questions

their patients: "My belief shouldn't be relevant when practicing. At the end of the day, it is all about the patient" (woman, Central, 9.5/10). Several students discussed that physicians make sacrifices for their work and are called upon to "tackle tough issues" (man, Central, 9.5/10) including providing, referring for, or discussing services that can be personally difficult for both patients and providers.

3.4. Competency 3: Patient autonomy

Many students discussed the importance of patient autonomy, particularly during abortion counseling. One student stated, "I don't know if I could encourage an abortion, but I know it's not my choice, it's not my body" (man, South, 9.5/10). Many reflected on the decision to terminate a pregnancy as a personal decision; one noting that it is a choice that "a woman has the right to make for herself" (woman, South, 7.5/10). Several students noted that honoring patients' autonomy might be challenging if their opinions differed from their patients' ("It can get hard when you face someone who you disagree with the choices they are making") (woman, Northeast, 10/10), but nonetheless believed this task to be important. There was frequent overlap between quotations citing patient autonomy (competency 3) and patient needs superseding self-interest (competency 2).

3.5. Competency 4: Physician accountability

Nearly all students agreed that abortion care is included in the responsibilities of an OB/GYN, and most perceived a professional obligation to learn how to perform abortions. Even among students with moral opposition to abortion, most believed abortion provision to be required training in OB/GYN. One student stated, "I want to be trained. I doubt I will be doing abortions, but it is very important for me to see and understand it" (man, Northeast, 7/10). Some students who did not plan to perform abortions saw this as a potential barrier between them and their patients or expressed concern that they could be letting their patients down because of their unwillingness to provide abortion procedures themselves. One student described: "I don't want to let my patients down...I want to be there for the patients, but at the same time I don't think I can be there for the patients without performing the abortion which is the main part that I have a problem with" (woman, West, 3/10).

Many students indicated that they would seek abortion training if their residency did not offer it. One said, "I want to be a very well-trained physician in all instances for all patients and all cases" (woman, South, 7.5/10). Among students who did not plan to perform abortions after residency, many hoped to have training during residency so they would be competent if the need for the procedure arose in future practice. Several students described an obligation to provide abortion care out of concerns for patients' safety if they did not. One student stated, "I want to provide the service so women don't have to have a septic abortion...If you can perform these well, you can save a woman's life" (woman, Northeast, 10/10).

3.6. Competency 5: Sensitivity to diverse populations

Several students expressed that they wished to be prepared to care for all patients they might encounter during their career, including individuals of all ages from different racial, cultural, and socioeconomic backgrounds. One student remarked on planning to have "a very diverse population of patients [and wanting to be] able to provide just common procedures that a lot of women will have to get" (woman, West, 10/10). However, in general few students specifically mentioned diverse patients when reflecting on abortion care.

3.7. Competency 6: Commitment to ethical principles

Many students believed that providing or referring for abortion care was the ethically right thing to do for patients, regardless of whether their personal beliefs allowed them to participate. Among students describing themselves as opposed to abortion and not intending to provide it, several discussed the ethical importance of

not withholding care. These comments included mention of general ethical principles rather than citing abortion provision as a professional responsibility of OB/GYN practice (competency 4). One student stated, "I don't think it's my job to withhold procedures or information or anything from my patients" (woman, Central, 9/10). Other students discussed the regional variability in availability of abortion services and the subsequent ethical dilemma of resource allocation. Finally, students commented on the importance of informed consent in ensuring that patients were certain in their decision to terminate a pregnancy without undue influence from others.

3.8. Other findings: Student attitudes exhibiting a lack of professionalism

Student responses that clearly violated the tenets of professionalism were rare but did occur. These responses were unique from those that simply failed to mention a competency in that they demonstrated a stance contradicting an AAMC professionalism competency. For example, when prompted with discrete case vignettes, a small number of students answered that they would advise patients requesting abortions to pursue options other than abortion, violating the principle of patient autonomy. Most of these students specified that they would refer for abortion if their patient insisted that it was the option they preferred. However, all of these same students' answers to other questions affirmed professional attitudes in other domains. For example, 1 student (woman, South, 7.5/10) who indicated that she would initially counsel patients requesting abortion care against pursuing abortion (violating Competency 3) also stated "We need to know how to provide that care" regarding abortion at another time in the interview, reflecting Competency 4. In another case, a student (woman, West, 3/10) stated she would "probably refer [a patient]...if she has thought it through for good reasons" (potentially violating Competency 3), but also stated that she would not want to change the patient's mind, reflecting acknowledgment of Competency 3. Elsewhere in the interview, this student also affirmed her desire to perform "unbiased counseling" regarding abortion for her patients, reflecting Competencies 4 and 6.

4. Discussion

We explored medical students' exhibition of professionalism in their responses to interview questions about abortion attitudes and case-based vignettes involving abortion. We found that students demonstrated professionalism when discussing abortion, regardless of their personal views on or intentions to provide abortion. Specifically, discussion of abortion enabled students to demonstrate at least 1, and in many cases, multiple, of the 6 AAMC professionalism competencies: humanism, patient needs superseding self-interest, patient autonomy, physician accountability, sensitivity to diverse populations, and commitment to ethical principles. Several students exhibited unprofessional attitudes when discussing abortion, which could be instructive for purposes of assessment and remediation. These findings suggest that discussing abortion could potentially be a useful means for teaching and assessing professionalism among medical students.

In addition to demonstrating the utility of abortion as a topic to facilitate professional development, our study had several other noteworthy findings. First, some trainees' inclination to advise patients requesting abortions to continue a pregnancy represents a teachable moment regarding the critical importance of humanism and respect for patient privacy and autonomy [22]. Second, we noted that responding to interview questions allowed students to scrutinize their own attitudes toward abortion in the context of professionalism. In several cases, students' views on abortion were discordant with their own professionalism ideals, and the opportunity to discuss abortion enabled them to clarify their thoughts, opinions, and preferred actions in hypothetical clinical scenarios. To this end, supporting reflection in this manner during medical school may further aid in learners' professional development.

Our study had several limitations that merit attention. The lack of a "gold standard" for professionalism assessment limited our ability to accurately assess professionalism. Similarly, we were not able to evaluate the impacts of professionalism values on interactions with patients as we did not assess behavior directly in this study. We collected our data 7 to 9 years prior to publication, and it is possible that participants' responses and discussions would change if we repeated the data collection more recently. Finally, while few students' spontaneous comments in this study pertained to AAMC professionalism competency 5 (sensitivity to diverse patient populations), we believe that the topic of abortion could elicit this professionalism competency more consistently if deliberately engaged given how profoundly racial, socioeconomic, and geographic inequity impacts abortion access in the US [23].

Our work raises questions that may lead to promising future investigation. First, it would be valuable to evaluate educational interventions that deliberately engage the AAMC competencies embedded within cases about abortion in addition to a less stigmatized topic (e.g., palliative care). It would be useful to compare individual interviews, such as those in this study, with group-based conversations. Finally, we would like to compare professionalism traits assessed during discussion with observed professionalism in clinical interactions, team settings, and objective structured clinical encounters (OSCEs) involving abortion cases.

This study has important implications for medical educators. We propose a framework of assessing students' professionalism by asking them to reflect on their attitudes toward abortion. Importantly, this framework would require faculty development, as faculty might feel challenged by facilitating these discussions due to their own personal beliefs. Further, it is important to clarify that students' interest in providing or not providing abortion is not a metric to assess professionalism. In our study, all students demonstrated professionalism regardless of their feelings about or intention to provide abortions. More specifically, students who identified as morally opposed to abortion and intended to opt out of abortion-related training demonstrated professional attitudes similarly to students who identified as strongly supporting abortion and intended to provide it. As a more directly clinically relevant option for incorporating this framework into medical education, we suggest the use of objective structured clinical encounters involving abortion to assess professionalism.

We found that answering questions about abortion attitudes and case vignettes enabled medical students to demonstrate their personal professionalism competencies or lack thereof, suggesting that discussion of abortion could be a useful tool to assess and address gaps in these competencies. We suggest that medical school curricula includes case-based discussions of abortion to elicit value conflicts and bias, thus facilitating professional development.

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.

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Supplementary materials

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