BMJ Global Health

Institutional leadership after *Dobbs*: a mixed methods analysis of US medical schools' public statements regarding abortion

Sarah M McNeilly ,[1] Vivian E Kim,[1] Carmen Conroy,[2] Antoinette Danvers[1,3]

To cite: McNeilly SM, Kim VE, Conroy C, *et al*. Institutional leadership after *Dobbs*: a mixed methods analysis of US medical schools' public statements regarding abortion. *BMJ Glob Health* 2024;**9**:e013641. doi:10.1136/bmjgh-2023-013641

Handling editor Seye Abimbola

Selected findings from this research were presented at the 2023 annual meetings of the American Medical Women's Association, AAMC Northeast Group on Educational Affairs and American Society of Reproductive Medicine, as well as the 2023 Women in Medicine Summit.

Received 7 August 2023
Accepted 2 December 2023

[1]Albert Einstein College of Medicine, Bronx, New York, USA
[2]University of California San Diego School of Medicine, La Jolla, California, USA
[3]Obstetrics and Gynecology, Montefiore Medical Center, Bronx, New York, USA

Correspondence to
Miss Sarah M McNeilly; sarah.mcneilly@einsteinmed.edu

ABSTRACT

Introduction Medical schools, as significant and influential organisations within their communities, have the potential and the capacity to impact abortion policy. Organisations often engage in advocacy by issuing public statements that clarify their stance on specific policies. This study analyses the quantity and quality of publicly discoverable statements that US medical schools issued regarding *Dobbs v Jackson Women's Health Organization*.

Methods We conducted a mixed methods study using an explanatory sequential design. Using qualitative analysis, an inductive thematic approach was used to identify themes from public statements made within 6 months of 2 May 2022, *Dobbs* leak. Descriptive statistics and logistic regression analysis were used to assess the association between themes and institutional characteristics.

Results Most institutions (n=124/188, 65.96%) did not issue public statements regarding *Dobbs*. Among all 188 US medical schools, allopathic institutions (OR=12.19, 95% CI (2.83 to 52.57), p=0.001), schools in protective states (OR=3.35, 95% CI (1.78 to 6.29), p<0.0001) and those with family planning divisions (OR=4.60, 95% CI (2.33 to 9.08), p<0.0001) were at increased odds of issuing statements. Of the 64 medical schools with statements, 64.06% (n=41/64) espoused pro-choice views, 34.37% (n=22) were neutral/non-committal and 1.56% (n=1) expressed antiabortion views. Those in protective states were at 3.35 times increased odds of issuing pro-choice statements (95% CI (1.16 to 9.72), p=0.03) compared with restrictive counterparts.

Conclusion Medical schools largely did not take a public stance on *Dobbs*. By refraining from actively engaging in this critical discourse, medical schools are foregoing a leadership opportunity to affect meaningful sociopolitical change, particularly in states with restrictive abortion laws.

WHAT IS ALREADY KNOWN ON THIS TOPIC

⇒ Medical schools have engaged in advocacy around numerous salient health policy issues, including the COVID-19 pandemic, the US gun violence epidemic and the movements for Black Lives and LGBTQ+ rights.

⇒ Little is known about the medical schools' systemic responses to the 2022 US Supreme Court's *Dobbs v Jackson Women's Health Organization* decision, which overturned the constitutional right to abortion.

WHAT THIS STUDY ADDS

⇒ This study analyses the quantity and quality of publicly discoverable statements that US medical schools issued regarding abortion within 6 months of *Dobbs*.

⇒ We found that most US medical schools neglected to issue a public statement regarding abortion within 6 months of the *Dobbs* decision and an even smaller fraction actually voiced support for abortion rights and access.

⇒ Several characteristics were associated with significantly increased odds of issuing a statement; allopathic institutions, those in abortion-protective states and those with family planning divisions were more likely to comment than their counterparts.

HOW THIS MIGHT AFFECT RESEARCH, PRACTICE OR POLICY

⇒ US medical schools largely refrained from public discourse following a historic legal development with immediate impacts on the healthcare system, including medical education itself.

⇒ This represents a missed leadership opportunity for US medical schools, who as significant and influential organisations within their communities may be well-positioned to abate harmful abortion policies.

INTRODUCTION

In recent years, it has become common for leading voices in healthcare to speak out on sociopolitical issues. Many have weighed in on historic developments including the COVID-19 pandemic, the US gun violence epidemic and the movements for Black Lives and LGBTQ+ rights.[1 2] Academic medicine, which includes medical schools, teaching hospitals and healthcare systems and professional societies, represents an important faction of this leadership, contributing over $728 billion, or about 3%, to the US gross domestic product.[3] For decades, medical

sociologists have described these organisations as 'complex institutions that are increasingly entwined with communities and subject to changes in state regulation'; yet, little is known about academic medicine's systemic response to US Supreme Court's *Dobbs v Jackson Women's Health Organization* decision, which ended the constitutional right to abortion and relegated the issue to US states.[4] A recent cross-sectional analysis of public statements made by one subset of this group—professional medical societies—showed that within 2 weeks of the *Dobbs* decision leak on 2 May 2022, just 9.1% of professional medical societies issued a statement about abortion access, and that number only reached 38.5% within 2 weeks of final Supreme Court decision.[5] However, analogous studies of other academic medical stakeholders—namely, medical schools—have not yet been published, highlighting a gap in the literature.

This dearth of knowledge is particularly concerning given medical schools' role as anchor institutions, large, place-based organisations with deep local roots.[4 6–8] Because anchor institutions rank among the largest employers, business purchasers and property owners within their communities, their organisational decision-making can profoundly impact everyday life in their neighbourhoods, cities and states.[4 6] The magnitude and scale of this influence in turn grants anchors substantial political, economic and sociocultural power, which has been leveraged to advance health equity. Examples of such influence include altering research and educational priorities, modifying human resources policies, investing in external programmes and partnerships and engaging in political lobbying.[7 8]

However, to make meaningful strides, institutions must be committed to social progress. Public statements serve as a platform for these institutions to express their dedication. Research examining how medical schools responded to recent sociopolitical issues suggest that public statements enable medical schools to communicate their institutional values and priorities both internally to students, faculty and administrators and externally to community members and partners, organisations that represent their policy interests and political leaders themselves.[9–11] For example, in their critical discourse analysis of public statements made in the wake of George Floyd's murder in 2020, Brown *et al* highlighted that "[public] statements may offer insight into how medical schools and national organizations were reflecting on and responding to these incidents."[9] Commentary from Kiang *et al* concurred, ultimately arguing that public statements regarding Floyd's murder represented a leadership failure on the part of academic medicine.[10] Thus, public statements regarding sociopolitical issues may represent an important first step in mobilising institutional resources and influence to challenge systemic inequity, particularly when those issues, like abortion, are locally adjudicated.

Further, medical schools possess numerous motivations to weigh in on *Dobbs*. At their core, restrictive reproductive health policies threaten patient and public health. A recent analysis of Centers for Disease Control data showed that abortion-restrictive states had a 62% higher perinatal maternal death rate and a 15% higher perinatal infant death rate than their abortion-protective counterparts.[12] In fact, another longitudinal cohort study of nearly 1000 patients demonstrated that denying someone wanted abortion care not only contributes to serious and preventable morbidity and mortality, including haemorrhage, eclampsia and death, but also has adverse social and economic sequelae, like increased rates of poverty and intimate partner violence.[13–15]

These adverse health outcomes are explained, in part, by the lack of reproductive healthcare providers in abortion-restricted areas. Whereas in abortion-protective states, 25% of counties are considered maternity care deserts, that number increases to 39% in restrictive states.[12] Concerningly, *Dobbs* stands to compound this workforce shortage: in a 2022 survey, most current and future physicians reported a preference for living and working in states that protect abortion.[16] Emerging data from the Association of American Medical Colleges (AAMC) suggests that the physician workforce may already be acting on these preferences, as evidenced by the decline in residency applications to abortion-restricted states across all specialties in 2023.[17] Various explanations exist for these trends, including that abortion restrictions undermine the physician–patient relationship, complicate the practice of evidence-based medicine and threaten the health, well-being and safety of physicians, their loved ones and their communities.[16 18 19]

In addition to such broader health system consequences, abortion restrictions adversely impact medical education itself. Even prior to *Dobbs*, abortion education was lacking within medical school curricula, with half of US medical schools offering either no abortion education or one single lecture.[20] Now, post *Dobbs*, 70% of medical students live in states that restrict abortion.[21] Since limiting abortion provision in turn limits clinical learning opportunities, abortion bans and restrictions are expected to exacerbate existing curricular deficiencies and compound disparities in access to foundational reproductive health training among US medical students.[21]

Thus, as anchor institutions for whom abortion restrictions pose significant challenges, medical schools possess both the power and the motivation to influence public policy and opinion around abortion. This makes understanding medical schools' engagement in sociopolitical leadership—especially regarding state and local legislative issues—of particular importance and frames our research questions: how often did US medical schools issue public statements on *Dobbs*? and to what extent did those statements advocate for abortion rights and access?[22]

In this cross-sectional study, we systematically analyse public statements from 188 US medical schools regarding the *Dobbs* decision to provide insight into their engagement in the global discourse on US abortion policy.

METHODS

We employed an explanatory sequential mixed methods study design and followed the Standards for Reporting Qualitative Research to report our methods and findings.[23] In the first phase, we reviewed websites and social media of medical schools to collect textual data and conducted a qualitative thematic analysis using the framework described by Nowell *et al*.[24] Based on the distribution of themes present in a statement, each was then categorised as pro-choice, neutral/non-committal or antiabortion. In the second phase, we performed a quantitative analysis to assess the number of public statements and their associations with institutional demographic characteristics. By using this sequential design, we aimed to provide a comprehensive understanding of the data by initially exploring the themes qualitatively and subsequently examining their quantitative associations.

The study team is comprised of three medical students who currently attend the Albert Einstein College of Medicine (SMM, VEK) and the University of California, San Diego School of Medicine (CC), who are members of Medical Students for Choice. It also includes one attending physician (AD) in the Department of Obstetrics and Gynecology, Division of Family Planning at the Montefiore Medical Center, who is also an associate professor at the Albert Einstein College of Medicine.

Between November 2022 and April 2023, the authors queried institutional websites and social media channels, as per Levy *et al*, to gather statements regarding abortion issued within 6 months of the *Dobbs* leak on 2 May 2022 and compiled data in Microsoft Excel.[5] To account for differences in organisational governance, we searched for both statements issued by medical schools themselves, as well as those issued by parent institutions presumed to represent the views of the medical school (eg, universities, health systems). For simplicity, we refer to both as statements from medical schools throughout.

All degree-granting medical schools located within the 50 US states and Washington, DC were included in the analysis, based on official listings from the AAMC and American Osteopathic Association as of 15 April 2023.[25 26] This included 151 allopathic and 37 osteopathic medical schools for a total of 188 institutions. Because this study focuses on the implications of *Dobbs* on US state laws and policies, we excluded the four allopathic institutions located in the Caribbean islands.

Thematic analysis was then performed to identify key themes related to institutional support for abortion rights and access.[24] Three independent reviewers (CC, SMM, VEK) developed a codebook by coding statements until thematic saturation was reached (n=11 for pro-choice, n=6 for non-committal, n=1 for antiabortion statements). Two authors coded remaining responses, and differences were resolved by discussion.

We then performed a quantitative analysis to examine the associations between selected institutional characteristics—degree type (allopathic/osteopathic), geographic location, funding type (public/private), religious affiliation (present/absent) and status of family planning division (present/absent)—and statement quantity and quality. For geographic location, the US state containing each medical school's headquarters/main campus was first recorded in Excel. This data was then further categorised based on relative restrictiveness and protectiveness of state abortion laws and policies, as per Guttmacher Institute ratings as of 15 April 2023. This classification used a 7-point Likert scale as follows: most protective (OR); very protective (CA, NJ, NM, NY, VT); protective (AK, CO, CT, DC, HI, IL, MA, ME, MD, MN, WA); some restrictions/protections (DE, MI, MT, NH, NV, RI, VA, WY); restrictive (FL, IA, IN, KS, NE, NC, ND, OH, PA, SC, UT, WI); very restrictive (AZ, GA); and most restrictive (AL, AR, ID, KY, LA, MS, MO, OK, SD, TN, TX, WV).[27]

We used descriptive statistics to describe the demographic characteristics of our sample and a multivariable logistic regression model to estimate an OR, which examines the association between the type of statement reported and demographic variables. Analyses were completed using Stata V.17.0 Basic Edition.

Patient and public involvement

Because this study used publicly available data not involving human subjects, institutional review board approval was not solicited and patient and public involvement was not applicable. The research question and outcome measures were formulated in response to a national legal decision with large-scale health system impacts and thus focused more on institutional rather than patient priorities, experiences and preferences, given the potential for academic medical institutions to shape the healthcare system at a macrolevel. Thus, patients were neither involved in the design, recruitment and conduct of this study nor the dissemination of its results.

RESULTS

Demographics

A total of 188 medical schools, consisting of 151 (80.32%) allopathic and 37 (19.68%) osteopathic institutions, were included in the analysis. As of 15 April 2023, most (n=97, 51.59%) US medical schools are located within the 26 states with restrictive abortion policies, with fewer present across the 16 states and Washington, DC deemed protective (n=73, 38.83%) and the 8 with mixed protections and restrictions (18, 9.57%). In addition, 100 US medical schools are public (53.19%) and 88 are private (46.81%); 16 institutions are religiously affiliated (8.51%) and 172 (91.49%) are not; and 52 have a dedicated family planning division (27.66%), while 136 (72.34%) do not. These demographic characteristics are also presented in table 1.

Overall quantity and quality of public statements

Most US medical schools did not issue a public statement addressing abortion rights and access after *Dobbs* in the 6 months following the Supreme Court leak on 2 May

Table 1 Demographic characteristics of 188 medical schools in the USA*

Characteristic	Number of institutions	Per cent of total
Overall	188	–
Degree type		
Allopathic (MD)	151	80.32%
Osteopathic (DO)	37	19.68%
Geographic location		
Protective	73	38.83%
Mixed restrictions and protections	18	9.57%
Restrictive	97	51.59%
Institutional funding		
Public	100	53.19%
Private	88	46.81%
Religious affiliation		
Religious affiliation	16	8.51%
No religious affiliation	172	91.49%
Family planning division		
Present	52	27.66%
Absent	136	72.34%

*For medical schools with multiple campuses, all demographic categories were tabulated in accordance with Association of American Medical Colleges and American Association of Colleges of Osteopathic Medicine definitions of 'institutions' versus 'branches/campuses'. Thus, when a single degree-granting institution operated campuses in multiple states, it was categorised based on its headquarters. This applied to the Mayo Clinic Alix School of Medicine, Edward Via College of Osteopathic Medicine, Kansas City University College of Osteopathic Medicine, Philadelphia College of Osteopathic Medicine, Touro University College of Osteopathic Medicine and Rocky Vista University College of Osteopathic Medicine.

2022. Of 188 US medical schools, a total of 62 unique, discoverable public statements regarding abortion were issued on behalf of 64 institutions; in two instances, a single statement from a parent institution was used to represent two distinct degree-granting medical schools. Statements represented 62 out of 151 allopathic medical schools and 2 out of 43 osteopathic medical schools (figure 1). A complete breakdown of statement issuance by institutional characteristic is presented in table 2.

Three overarching themes emerged from the qualitative analysis: pro-choice, antiabortion and non-committal/neutral sentiments. Pro-choice statements affirmed institutional support for abortion rights and access, including illustrative phrases like "the Supreme Court's impending *Dobbs v. Jackson* decision could have a devastating impact on our nation's medical practice, medical training, and most importantly the health and safety of our nation's citizens." By extension, neutral/non-committal statements neglected to include any such pro-choice sentiments. Often, they explicitly acknowledged stakeholders on both sides or conveyed an institutional desire to remain apolitical, stating, for example, "the university has a responsibility to speak and educate the community about issues that impact our campus community without directly engaging in political disagreements." Both pro-choice and neutral statements also frequently included informational public health messages that clarified the legal status of abortion care in a particular state and/or its availability a particular institution; these were coded as neutral sentiments. The single antiabortion statement praised the *Dobbs* decision and called for continued antiabortion action, stating "I want to express our gratitude to Almighty God for the landmark decision in *Dobbs v. Jackson Women's Health Organization*… I am proud that we are now officially training the first Post Roe-v-Wade generation of leaders who will be Champions for Christ to continue to advocate for the life of mothers and their unborn babies." A full list of qualitative themes with representative quotes is presented in table 3.

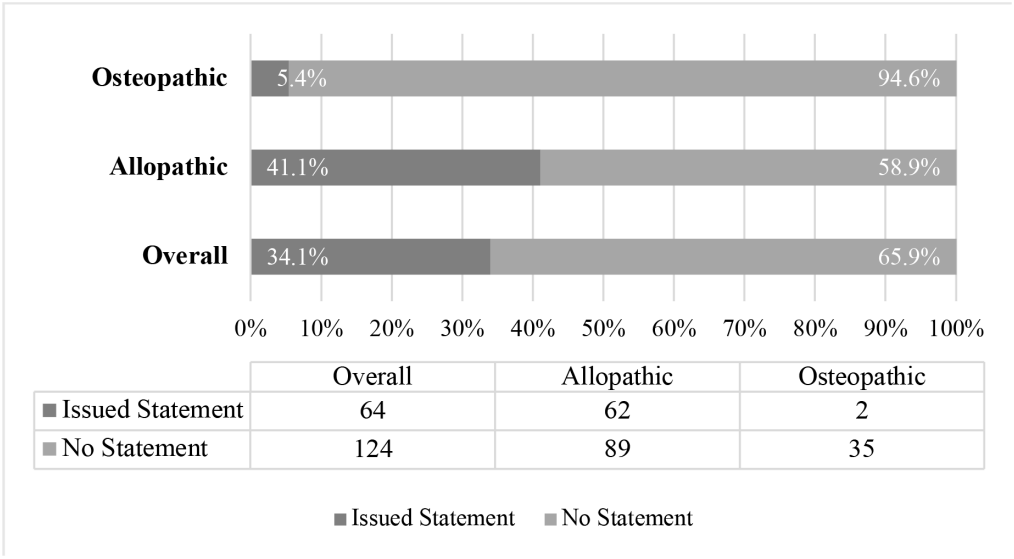
Overall, the most common themes represented pro-choice sentiments. These included statements stating that an institution will continue providing or supporting abortion care (n=33/62, 53.23%), invoking medical ethics (n=30, 48.39%), describing abortion restrictions' negative impact on patient and/or public health (n=28, 45.16%) as well as on health disparities (n=27, 45.16%) and evoking human rights (n=24, 38.71%). Despite this support for abortion rights and access, just two institutions (3.23%) outright demanded the reversal of *Dobbs* and repeal of antiabortion legislation. The most common neutral/non-committal themes were stating the institution will follow local laws (n=27, 43.55%), acknowledging that abortion restrictions impact the provision of reproductive healthcare (n=25 400.32%) and stating that there are community members on both sides (n=24, 38.71%). In summary, of the 64 institutions issuing public statements, 41 espoused pro-choice views (64.06%), 22 were neutral/non-committal (34.38%) and 1 was antiabortion (1.56%). Thus, 21.81% of all US medical schools (n=41/188) issued a pro-choice statement in the 6 months following *Dobbs*. A summary of statement quality by institutional characteristic is presented in table 4.

Associations between institutional characteristics and public statements

Degree type

Logistic regression analysis revealed that allopathic medical schools had 12.19 times higher odds of issuing any statement following *Dobbs* compared with osteopathic medical schools (OR=12.19, 95% CI (2.83 to 52.57), p=0.001). Whereas 62 out of 151 allopathic medical schools issued a statement (41.06%), 2 out of 37 osteopathic medical schools did (5.41%).

Among statement issuers, allopathic medical schools were also at greater odds of issuing a pro-choice statement relative to osteopathic schools (OR=1.82, 95% CI (0.11 to 30.51), p=0.68), though the increase was not statistically



	Overall	Allopathic	Osteopathic
Issued Statement	64	62	2
No Statement	124	89	35

Figure 1 Per cent of US allopathic and osteopathic medical schools who issued statements in response to *Dobbs v Jackson Women's Health Organization* in the 6 months post *Dobbs* leak.

significant. Allopathic schools issued 62 statements, of which 40 (64.51%) were pro-choice, 22 (35.49%) were neutral/non-committal and none were antiabortion. Osteopathic schools issued two statements, of which one was pro-choice and one was antiabortion.

Geographic location

Medical schools in protective states were at 3.35 times greater odds of issuing a statement compared with those with protective or mixed restrictive and protective policies (OR=3.35, 95% CI (1.78 to 6.29), p<0.0001). Nearly twice as many statements came from medical schools in protective states (n=37/73, 50.68%) compared with their counterparts in restrictive states (n=19/97, 19.59%).

Among statement issuers, medical schools located in abortion protective states were more likely to issue pro-choice statements compared with all others (OR=3.35,

Table 2 Relationship between statement issuance and institutional characteristics of 188 US medical schools*

Institutional characteristic	Number of institutions	Number of statement issuers (n, %)	Number of non-issuers (n, %)	OR of issuing (p value)
Overall	188	64	124	—
Degree type				12.19 (p=0.001)
Allopathic (MD)	151	62 (41.06%)	89 (58.94%)	
Osteopathic (DO)	37	2 (5.41%)	35 (94.59%)	
Geographic location				3.35 (p<0.0001)
Protective	73	37 (50.68%)	36 (49.31%)	
Mixed restriction and protection	18	8 (44.44%)	10 (55.56%)	
Restrictive	97	19 (19.59%)	78 (80.41%)	
Institutional funding				0.68 (p=0.21)
Public	100	30 (30.00%)	70 (70.00%)	
Private	88	34 (38.64%)	54 (61.36%)	
Religious affiliation				0.62 (p<0.0001)
Religious affiliation	16	4 (25.00%)	12 (75.00%)	
No religious affiliation	172	60 (34.88%)	112 (65.11%)	
Family planning divisions				4.60 (p<0.0001)
Present	52	31 (59.61%)	21 (40.39%)	
Absent	136	33 (24.26%)	103 (75.73%)	

*OR compares protective states to restrictive states and excludes states with mixed restrictions and protections.

Table 3 Themes and illustrative quotes from 62 statements released by US medical schools in the 6 months post *Dobbs* leak

Pro-choice themes	Number (n, %)	Representative quote
States institution will continue providing/supporting abortion care	33 (53.23%)	In [our state], where abortion remains legal, we will continue to provide contraception/family planning, fertility treatment, care for general and high-risk pregnancies, abortion, and miscarriage management.
Evokes medical ethics (eg, autonomy, justice)	30 (48.39%)	This opinion allows states to restrict patient autonomy and to insert government into the relationship between healthcare providers and patients.
Describes negative impact on patient/public health	28 (45.16%)	Removing access to [abortion] services will significantly impact maternal health outcomes and increase maternal deaths in the United States.
Describes negative impact on health disparities	27 (43.55%)	These impacts will fall disproportionately on women, people of color, and those who are unable to travel out-of-state for their medical care.
Evokes human rights	24 (38.71%)	Ending the constitutional right to an abortion threatens the rights of pregnant people to control their bodies and their lives.
States that abortion is healthcare	22 (35.48%)	A woman's right to the best health care includes the right to the best reproductive health care. Access to a safe abortion is a necessary facet of women's health care.
Describes negative impact on practice of medicine	13 (20.97%)	The Supreme Court's impending *Dobbs v. Jackson* decision could have a devastating impact on our nation's medical practice, medical training, and most importantly the health and safety of our nation's citizens.
Describes negative impact on medical training	11 (17.74%)	Those statutes will limit the ability of women to access a full range of reproductive services and of training programs to educate healthcare providers to safely and expertly provide those services.
Acknowledges pro-choice statement made by other professional association (eg, AAMC)	6 (9.68%)	The Association of American Medical Colleges (AAMC) has reaffirmed its commitment to physician training that supports this position. We are also committed.
Demands reversal of *Dobbs*/overturn of restrictions	2 (3.23%)	We call on the Supreme Court to abandon their draft decision and uphold *Roe v. Wade* to protect abortion access across the United States.
Anti-abortion themes	**Number (%)**	**Representative quote**
Praises *Dobbs*	1 (1.64%)	I want to express our gratitude to Almighty God for the landmark decision in *Dobbs v. Jackson Women's Health Organization* handed down by the Supreme Court of the United States.
Calls for continued anti-abortion action	1 (1.64%)	I am proud that we are now officially training the first Post Roe-v-Wade generation of leaders who will be Champions for Christ to continue to advocate for the life of mothers and their unborn babies.
Neutral/non-committal themes	**Number (%)**	**Representative quote**
States institution will follow local laws and policies	27 (43.55%)	[Our] priority remains ensuring our physicians and patients have clarity when making decisions about pregnancy within the limits of the law. We will take the next few weeks to fully understand the terms of the new law and how to incorporate the changes into our medical practice…
Discusses impact of abortion restrictions on reproductive health care overall	25 (40.32%)	[Medical school] remains deeply committed to women's healthcare and reproductive rights for all, including childbearing decisions, maternal health, and their effect on families through our research and education missions.

Continued

Table 3 Continued

Pro-choice themes	Number (n, %)	Representative quote
Acknowledges stakeholders on both sides of the issue	24 (38.71%)	Abortion is obviously a deeply emotional and divisive issue. There are doubtless many in our university community who oppose the practice on moral grounds. That is of course entirely their right, and their views should be respected.
Describes importance of open, respectful discourse	21 (33.87%)	I encourage you to be kind. To listen to each other and to respect each other's position. We are better when we work together.
Acknowledges impact on healthcare that is non-reproductive in nature	17 (27.42%)	This cannot be seen or treated as a "women's issue." Where reproductive rights and freedoms are denied, communities, families and all their members are affected.
States institution is non-partisan or apolitical	3 (4.84%)	The university has a responsibility to speak and educate the community about issues that impact our campus community without directly engaging in political disagreements.

ACOG, American College of Obstetricians and Gynecologists.

95% CI (1.16 to 9.72), p=0.03). In abortion protective states, 28 out of 37 statements were pro-choice (75.67%) compared with 5 out of 8 from mixed restriction/protection states (62.50%) and 8 out of 19 from restrictive states (42.11%).

Institutional funding

Public medical schools were at decreased odds of issuing statements compared with private medical schools (OR=0.68, 95% CI (0.37 to 1.25), p=0.21). While 30 out of 100 public medical schools issued statements (30.00%), 34 out of 88 private medical schools did (38.64%).

Public schools were not at increased odds of issuing a pro-choice statement (OR=1.24, 95% CI (0.44 to 3.46), p=0.68). Of the 30 statements issued by public schools, 20 (66.67%) expressed pro-choice views, while 21 of 34 (61.76%) statements from private schools did the same.

Table 4 Relationship between pro-choice sentiment and institutional characteristics among 64 US medical schools that issued public statements*

Institutional characteristic	Number of statements	Number of pro-choice (n, %)	Number of neutral (n, %)	Number of antiabortion (n, %)	OR of pro-choice (p value)
Overall	64	41 (64.06%)	22 (34.38%)	1 (1.56%)	–
Degree type					1.82 (p=0.68)
Allopathic (MD)	62	40 (64.51%)	22 (35.49%)	0 (0.00%)	
Osteopathic (DO)	2	1 (50.00%)	0 (0.00%)	1 (50.00%)	
Geographic location					3.35 (p=0.03)
Protective	37	28 (75.67%)	9 (24.33%)	0 (0.00%)	
Mixed restrictions and protections	8	5 (62.50%)	2 (25.00%)	1 (12.50%)	
Restrictive	19	8 (42.11%)	11 (57.89%)	0 (0.00%)	
Institutional funding					1.24 (p=0.68)
Public	30	20 (66.67%)	10 (33.33%)	0 (0.00%)	
Private	34	21 (61.76%)	12 (35.29%)	1 (2.94%)	
Religious affiliation					0.17 (p=0.13)
Religious affiliation	4	1 (25.00%)	2 (50.00%)	1 (25.00%)	
No religious affiliation	60	40 (66.67%)	20 (33.33%)	0 (0.00%)	
Family planning division					2.39 (p=0.11)
Present	31	23 (74.19%)	8 (25.80%)	0 (0.00%)	
Absent	33	18 (54.54%)	14 (42.42%)	1 (3.03%)	

*OR compares protective states to restrictive states and excludes states with mixed restrictions and protections.

Religious affiliation

Religiously affiliated medical schools were at decreased odds of issuing a statement, though this relationship was not statistically significant (OR=0.62, 95% CI (0.19 to 2.01), p=0.43). In total, 4 out of 16 religiously affiliated institutions issued statements (25.00%) compared with 60 out of 172 non-affiliated institutions (34.88%).

Similarly, among statement issuers, religiously affiliated institutions had decreased odds of issuing a pro-choice statement, though these results were also not statistically significant (OR=0.17, 95% CI (0.02 to 1.71), p=0.13). Out of the 4 statements made by religiously affiliated institutions, 1 was pro-choice (25.00%), 2 were non-committal (50.00%) and 1 was antiabortion (25.00%). Among the 60 statements made by non-affiliated institutions, 40 were pro-choice (66.67%) and the remaining 20 were neutral/non-committal (33.33%).

Family planning division

Institutions with dedicated family planning divisions were increased odds of issuing a statement compared with those without (OR=4.60, 95% CI (2.33 to 9.08), p<0.0001). In total, 31 out of 52 institutions with a family planning division issued statements (59.61%), compared with 33 out of 136 institutions without a dedicated family planning entity (24.26%).

Moreover, 23 of 31 statements issued by institutions with family planning divisions expressed pro-choice sentiments (74.19%) compared with 18 of 33 statements from schools without one (54.54%). Among statement issuers, schools with a family planning division were not found to be at increased odds of issuing a pro-choice statement compared with schools without (OR=2.39, 95% CI (0.83 to 6.89), p=0.11).

DISCUSSION

This study examining the quantity and quality of medical schools' responses to *Dobbs* demonstrates that most medical schools chose not to voice support for abortion rights and access following a historic legal decision which directly impacts public health, clinical practice and medical education. Approximately two-thirds (65.96%) of all US medical schools neglected to issue any statement and four-fifths (78.19%) failed to issue a pro-choice statement. Several factors were associated with a statistically significant increase in the likelihood of issuing a statement, including being an allopathic institution, operating within an abortion protective state and having a dedicated family planning division. These findings underscore the potential impact of institutional characteristics on willingness to engage in public discourse on abortion.

This lack of public statements generally, and pro-choice statements specifically, is concerning because it highlights that medical schools are among the healthcare system leadership that have neglected to advocate for abortion, despite its widespread recognition as essential, evidence-based medicine.[28 29] While it is true that governing bodies in medical education, including the AAMC and American Association of Colleges of Osteopathic Medicine, released pro-choice public statements following *Dobbs*, our thematic analysis showed that only six institutions referenced statements from national organisations like the AAMC; thus, messages from these governing bodies likely have a more limited local reach.[30 31] Moreover, because the *Dobbs* decision overturned the federal right to abortion and made it a state-level issue, statements made by national organisations may be less likely to carry weight in local policy discussions than those from medical schools and their institutional affiliates.

In fact, our data underscores that the very institutions poised to experience the most severe consequences of abortion restrictions—medical schools located in restrictive states—were less likely to issue statements on *Dobbs* than others. This is particularly alarming considering medical schools' unique capacity to influence their local environments as anchor institutions. In the absence of a constitutional right to abortion, state, rather than national, government leaders are determining the extent to which abortion is protected or restricted. State legislators have capitalised on this unprecedented autonomy by introducing and enacting a bevy of abortion bans and restrictions; in 2022 alone, 563 restrictive abortion policies were introduced and 50 were signed into law.[32] In total, 12 US states have now banned abortion and 2 more have zero remaining providers.[33] Yet, the overwhelming majority of medical schools still chose silence—not just in the immediate wake of *Dobbs*, but every day since. This represents a missed opportunity for medical schools individually and academic medicine collectively to participate in critical public discourse against harmful abortion policies. Although reticence on *Dobbs* was the norm among medical schools, those who did speak up frequently did so to simultaneously affirm the importance of abortion rights and access and share locally relevant public health information, underscoring the multifaceted benefits of issuing public statements. Indeed, given medical schools' leadership role as anchor institutions, their public statements advocating for the restoration and protection abortion rights and access could help catalyse political and legislative change, especially in states enforcing or considering abortion bans and restrictions.[7] By speaking out, medical schools could capitalise on their local sociopolitical and cultural influence to directly put pressure on local government officials to ameliorate state policy. Moreover, statements may also affect the policy landscape more indirectly, for example, by signalling policy priorities to lobbying organisations that commonly represent the interests of academic medicine or by inspiring fellow business and community leaders to join the fight.[34 35] Beyond policy, public statements from medical schools also represent an important facet of community stewardship. By declining to publicly state their support of abortion rights and access, many medical schools failed

to align their institutional values with those of their students, faculty and employees, who broadly support and frequently require abortion access for themselves and their patients.[36–39] In doing so, medical schools strayed from academic medicine's central mission of improving health.[40]

Strengths of this study include its comprehensive assessment of statements from all US medical schools. While previous research focused either on the number of statements or their thematic content, this research examined both, as well associations with institutional characteristics relevant to the current sociopolitical context. Moreover, its discussion of medical schools' responses within the context of their role as anchor institutions makes it broadly relevant to the academic medicine community, for which political and business strategies are highly intertwined and thus, for whom "[becoming] adept in issues management and stakeholder management" is especially important.[41] Although the *Dobbs v Jackson Women's Health Organization* decision most readily impacts medical schools operating within the US healthcare system, its implications for international political movements and legislative trends lend this issue global relevance.[42]

This study is limited by the subjective nature of qualitative thematic analysis, which relies on the judgement of researchers. However, we made efforts to mitigate this by using a validated approach to thematic analysis and following recommended standards for reporting qualitative research. Moreover, its focus on public statements made in the 6 months post *Dobbs* leak may neither fully capture the full breadth of actions that medical schools have taken, including internal communications, nor the changes in those actions over time.

CONCLUSION

Despite their influential position as anchor institutions capable of shaping local politics, community opinions and medical practice, most medical schools chose not to publicly address the *Dobbs v Jackson Women's Health Organization* decision at all. Even fewer explicitly voiced support for continued access to abortion. Highlighting this resounding silence from medical schools following the *Dobbs* decision suggests that there is significant untapped potential for medical schools to influence public opinion and public policy regarding abortion and thus reveals a missed leadership opportunity. This is particularly true for medical schools in abortion-restrictive states, where systemic sociopolitical change is both necessary and feasible.

Twitter Sarah M McNeilly @mcneillymed

Contributors SMM and VEK conceived of the initial study design and all authors helped to evolve it. SMM, VEK and CC gathered and verified the data and performed the qualitative thematic analysis. SMM performed the initial quantitative analysis and AD repeated it. All authors discussed the results and contributed to the final manuscript. SM is the guarantor.

Funding The authors have not declared a specific grant for this research from any funding agency in the public, commercial or not-for-profit sectors.

Competing interests None declared.

Patient and public involvement Patients and/or the public were not involved in the design, or conduct, or reporting, or dissemination plans of this research.

Patient consent for publication Not applicable.

Ethics approval Not applicable.

Provenance and peer review Not commissioned; externally peer reviewed.

Data availability statement The datasets generated by the researchers are available from the corresponding author on reasonable request.

ORCID iD

Sarah M McNeilly http://orcid.org/0000-0003-2075-9500

REFERENCES

1 Argenti P. When should your company speak up about a social issue? Harvard Business Review, 2020. Available: https://hbr.org/2020/10/when-should-your-company-speak-up-about-a-social-issue
2 Reis TE. *Edleman Trust Barometer*. 2023. Available: https://www.edelman.com/sites/g/files/aatuss191/files/2023-03/2023%20Edelman%20Trust%20Barometer%20Global%20Report%20FINAL.pdf
3 Nienow S, Brown EG, Hogan M, *et al*. *Economic Impact of AAMC Medical Schools and Teaching Hospitals*. American Association of Medical Colleges, 2022.
4 Franz B, Skinner D, Wynn J, *et al*. Urban hospitals as anchor institutions: frameworks for medical sociology. *Socius* 2019;5:237802311881798.
5 Levy MS, Fishbach S, Salles A, *et al*. When do medical societies take a stand on abortion *J Gen Intern Med* 2023;38:1559–62.
6 Harkavy I, Zuckerman H. *Eds and Meds: Cities' Hidden Assets*. The Brookings Institution, 1999. Available: https://www.brookings.edu/wp-content/uploads/2016/06/09_community_development_report.pdf
7 Koh HK, Bantham A, Geller AC, *et al*. Anchor institutions: best practices to address social needs and social determinants of health. *Am J Public Health* 2020;110:309–16.
8 Dave G, Wolfe MK, Corbie-Smith G. Role of hospitals in addressing social determinants of health: A Groundwater approach. *Prev Med Rep* 2021;21:101315.
9 Brown A, Auguste E, Omobhude F, *et al*. Symbolic solidarity or virtue signaling? A critical discourse analysis of the public statements released by academic medical organizations in the wake of the killing of George Floyd. *Acad Med* 2022;97:867–75.
10 Kiang MV, Tsai AC. Failure of leadership in U.S. academic medicine after George Floyd's killing by police and amidst subsequent unrest. *Ann Epidemiol* 2022;65:116–9.
11 Sotto-Santiago S, Sharp S, Mac J, *et al*. Reclaiming the mission of academic medicine: an examination of institutional responses to (Anti)Racism. *AEM Educ Train* 2021;5(Suppl 1):S33–43.
12 Declercq E, Barnard-Mayers R, Zephyrin L, *et al*. The U.S. maternal health divide: the limited maternal health services and worse outcomes of States proposing new abortion restrictions. 2022.
13 Gerdts C, Dobkin L, Foster DG, *et al*. Side effects, physical health consequences, and mortality associated with abortion and birth after an unwanted pregnancy. *Womens Health Issues* 2016;26:55–9.
14 Foster DG, Biggs MA, Ralph L, *et al*. Socioeconomic outcomes of women who receive and women who are denied wanted abortions in the United States. *Am J Public Health* 2018;108:407–13.
15 Upadhyay UD, Foster DG, Gould H, *et al*. Intimate relationships after receiving versus being denied an abortion: A 5-year prospective study in the United States. *Perspect Sex Reprod Health* 2022;54:156–65.
16 Bernstein SA, Levy MS, McNeilly S, *et al*. Practice location preferences in response to state abortion restrictions among physicians and Trainees on social media. *J Gen Intern Med* 2023;38:2419–23.
17 Orgera K, Mahmood H, Grover A. *Training Location Preferences of U.S. Medical School Graduates Post Dobbs v*. Jackson Women's

Health, 2023. Available: https://www.aamcresearchinstitute.org/our-work/data-snapshot/training-location-preferences-us-medical-school-graduates-post-dobbs-v-jackson-women-s-health
18 Blair JE, Mayer AP, Caubet SL, *et al*. Pregnancy and parental leave during graduate medical education. *Academic Medicine* 2016;91:972–8.
19 Stentz NC, Griffith KA, Perkins E, *et al*. Fertility and childbearing among American female physicians. *Journal of Women's Health* 2016;25:1059–65.
20 Burns RM, Shaw KA. Standardizing abortion education: what medical schools can learn from Residency programs. *Curr Opin Obstet Gynecol* 2020;32:387–92.
21 Traub AM, Mermin-Bunnell K, Pareek P, *et al*. The implications of overturning Roe v. wade on medical education and future physicians. *Lancet Reg Health Am* 2022;14:100334.
22 Bordage G. Conceptual frameworks to illuminate and magnify. *Med Educ* 2009;43:312–9.
23 O'Brien BC, Harris IB, Beckman TJ, *et al*. Standards for reporting qualitative research: a synthesis of recommendations. *Acad Med* 2014;89:1245–51.
24 Nowell LS, Norris JM, White DE, *et al*. Thematic analysis: striving to meet the trustworthiness criteria. *Int J Qual Methods* 2017;16.
25 American Association of Medical Colleges. Table B-1.2: total enrollment by U.S. In: *MD-Granting Medical School and Gender, 2018-2019 through 2022-2023*. 2022. Available: https://www.aamc.org/media/6101/download
26 Americn Osteopathic. 1 in 4 U.S. medical students attends an Osteopathic medical school. In: *Accessed April 15, 2023*. Available: https://osteopathic.org/about/affiliated-organizations/osteopathic-medical-schools/
27 Guttmacher Institute. *Interactive Map: US Abortion Policies and Access After Roe*. Available: https://states.guttmacher.org/policies/abortion-policies
28 American College of Obstetricians and Gynecologists. *Abortion is Healthcare. American College of Obstetricians and Gynecologists: Advocacy*. Available: https://www.acog.org/advocacy/facts-are-important/abortion-is-healthcare
29 Health topics: Abortion. World Health Organization, Available: https://www.who.int/health-topics/abortion#tab=tab_1
30 American Association of Colleges of Osteopathic Medicine. *AACOM Responds to Supreme Court Decision to Overturn Roe v Wade*. American Association of Colleges of Osteopathic Medicine, Available: https://www.aacom.org/news-reports/news/2022/06/30/aacom-responds-to-supreme-court-decision-to-overturn-roe-v.-wade
31 American Association of Medical Colleges. *AAMC Statement on Supreme Court Decision in Dobbs v*. Jackson Women's Health Organization, Available: https://www.aamc.org/news/press-releases/aamc-statement-supreme-court-decision-dobbs-v-jackson-women-s-health-organization
32 Nash E, Ephross P, Guttmacher Institute. State policy trends 2022: in a devastating year, US Supreme Court's decision to overturn roe leads to bans. In: *Confusion and Chaos*. 2022. Available: https://www.guttmacher.org/2022/12/state-policy-trends-2022-devastating-year-us-supreme-courts-decision-overturn-roe-leads
33 Nash E, Guarnieri I, Guttmacher. *Six Months Post-Roe, 24 US States Have Banned Abortion or Are Likely to Do So: A Roundup*. 2023. Available: https://www.guttmacher.org/2023/01/six-months-post-roe-24-us-states-have-banned-abortion-or-are-likely-do-so-roundup
34 Willson PD. The importance of lobbying to advance health and science policy. *Acad Med* 2020;95:13–5.
35 Counts NZ, Taylor LA, Willison CE, *et al*. Healthcare lobbying on upstream social determinants of health in the US. *Prev Med* 2021;153:106751.
36 Pololi L, Kern DE, Carr P, *et al*. The culture of academic medicine: faculty perceptions of the lack of alignment between individual and institutional values. *J Gen Intern Med* 2009;24:1289–95.
37 Schmuhl NB, Rice LW, Wautlet CK, *et al*. Physician attitudes about abortion and their willingness to consult in abortion care at a midwestern academic medical center. *Contraception* 2021;104:278–83.
38 Levy MS, Arora VM, Talib H, *et al*. Abortion among physicians. *Obstet Gynecol* 2022;139:910–2.
39 Farmer LE, Clare CA, Liberatos P, *et al*. Exploring barriers to abortion access: medical students' intentions, attitudes and exposure to abortion. *Sexual & Reproductive Healthcare* 2022;34:100790.
40 Ramsey PG, Miller ED. A single mission for academic medicine: improving health. *JAMA* 2009;301:1475–6.
41 Souba WW, Weitekamp MR, Mahon JF. Political strategy, business strategy, and the academic medical center: linking theory and practice. *J Surg Res* 2001;100:1–10.
42 Singh S, Sedgh G. Global implications of overturning roe V wade. *BMJ* 2022;378:2025.