Graduate Medical Education's Role in the Battle for Evidence-Based Care

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tsunami of legislation in US states has already or is poised to take away the rights of patients and physicians to consider and choose evidence-based, high-quality care. This legislation is highlighted by the Dobbs v Jackson Women's Health Organization June 2022 Supreme Court decision that removed a woman's right to choose what happens to her body during pregnancy. Currently, 58% of US women of reproductive age (15-44 years) live in states hostile to reproductive rights. These restrictions disproportionately affect marginalized groups: low income, Medicaid or no health insurance, and non-White.^{2,3} These hostile states also house female graduate medical education (GME) trainees, who currently comprise 46% of all GME trainees.⁴ In these states pregnancy, miscarriage, cancer, and other treatment decisions will not be made by the patient, family, and clinician, but rather by lawyers and state legislatures who lack medical knowledge and training. These laws affect not just obstetricians and pregnant women, but also emergency medicine, family medicine, oncologists, neonatologists, and many other disciplines and professions.

At the same time clinicians are receiving threats and being blocked by laws from providing recommended gender-affirming care.5 Teachers cannot follow best educational and child development practices for their students. Bans on books and art that report historical events, well-established scientific findings, and other topics that persons with individual political or religious beliefs find objectional are increasing. History is replete with examples of how autocratic societies, if they control children's educational experiences, can effectively alter societal morals and actions to ones that would previously have been considered abhorrent. In much of the United States, it appears that we are reaching that tipping point, where cruel and even life-threatening actions are sanctioned by law.

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Restrictive State Laws and GME

These enacted and proposed laws vary from the ludicrous (banning women/men wearing each other's clothing in adult entertainment sites)⁷ to the lethal, in criminalizing life-preserving care to pregnant women³ and vaccine administration,⁸ and impeding the safe growth and development of children.⁹ As a result, health professions' morale, already low, is likely to worsen. These laws also challenge trainees' professionalism, achievement of critical competencies, and recruitment of trainees and faculty to states hostile to evidence-based medical care.

Applicants to residency programs may choose to limit applications based on geography, to optimize learning and avoid conflicts between best care versus permitted care. Similarly, the legal environment and prevalent risks may discourage applicants, who may otherwise have great aptitude for the field, from choosing certain specialties. The most recent National Resident Matching Program data support these implications. 10 Problems with resident recruitment are likely to have a snowball effect in terms of recruitment of skilled clinicians to restrictive states, which already have low physician-to-patient ratios. Note that states with the highest maternal mortality and lowest percentage of obstetric clinicians per population are also those with current or pending laws that restrict best medical care.3 Most of these states also have the highest infant and child mortality rates in the United States. 11,12

How Did We Get Here?

How did a country that has sent people to the moon, identified the components of DNA, and produced countless innovations to better human life end up with half or more states preventing high-quality, science-based health care? One group, on the wane in terms of population, appears desperate to maintain power through demonizing others' beliefs—this is another familiar story in history. In the United States the majority White population is projected to become a minority in 2045¹³; religious beliefs are

declining¹⁴; younger generations embrace a global, diverse, and gender nonbinary world¹⁵; while the economic gap between the top 1% and the rest is enormous and expanding.¹⁶ Despite social and political groups using gerrymandering and emotional "whistles" to obscure facts, research shows that most Americans disagree with the current wave of anti-science laws that restrict reproductive and LGBTOIA+ rights.^{17,18}

Actions in Response

One proposal is that medical societies and health care organizations should "vote with their feet" and no longer schedule (or members attend, if scheduled) meetings in states with laws harmful to patients. ¹⁹ Others have countered that this will have little political effect but may harm hospitality workers who are already struggling to overcome socioeconomic challenges. ¹⁹

Dr Matthew Wynia poses that collective civil disobedience may be the ethical response in situations in which "laws directly and immediately threaten the health of patients." He cites the American Medical Association Code of Medical Ethics:

In some cases, the law mandates conduct that is ethically unacceptable. When physicians believe a law violates ethical values or is unjust, they should work to change the law. In exceptional circumstances of unjust laws, ethical responsibilities should supersede legal duties.²¹

As in other civil rights movements in the United States, decisions by clinicians or health organizations to provide evidence-based care risk fines, loss of license to practice, and prison.²⁰ Physicians have not always put patients and ethical responsibilities above their own safety and pocketbook. Yet if all GME institutions and faculty refused to comply, would states be able to enforce these laws?

As key role models, GME physicians and other faculty must honestly discuss these conflicts and help their colleagues and trainees arrive at decisions guided by highest ethical standards. Practicing evidencebased high-quality care, promoting patient autonomy (patient-centered care), and avoiding harm (maleficence) are surely ethical imperatives that no law can change. If states can remove patient autonomy, other deleterious actions can follow. If Missouri can mandate that the state, not a woman, controls a pregnant woman's body in nearly all abortion considerations, and women are thus mandated to share their organs with another "person,"22 then it follows that a state can mandate organ donation in all cases of neurological death.²³ As Drs Jake Earl and Caitlin Cain point out, "if the government can force a conscious, living person to give up control of their body to save just 1 life, then surely it can require extraction and

redistribution of organs from a deceased person for an even greater social benefit."²³ In addition, it follows that a state should be able to compel healthy, non-pregnant persons to serve as living organ, blood, or bone marrow tissue donors regardless of a patient's personal health beliefs and in violation of patient autonomy.²³

Alone, GME will not solve these challenges, nor will US physicians and health care leaders—this is clear from the past few years of anti-science COVID-19 vaccine and other treatment campaigns. However, GME must solve the threats to resident learning, professionalism, and morale, while ensuring that all residents, including those pregnant and from groups targeted by restrictive laws, are supported and have access to high-quality care. It is imperative that GME prepares trainees to evaluate legislative decisions, act as patient advocates, and practice evidence-based medicine in this dynamic landscape.

This issue of the *Journal of Graduate Medical Edu*cation contains several special articles from faculty and learners in obstetrics and gynecology, emergency medicine, and plastic surgery that provide situation assessments and proposals.²⁴⁻²⁶ In addition, a Perspectives article from a pediatrics trainee describes the difficult decision not to work in a state that undervalues child health.²⁷ We invite additional articles on this topic as well as your thoughts in letters.

GME is a powerful time of learning—from 0 to 100 mph—and gone in a flash. Learning goes on for as long as one practices, but all educators would agree that residency and fellowship are critical periods. The loss of key experiences, ethical role models, and professionalism development may not be adequately recovered later.

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