Director's Corner

The Fauci Effect: An Unprecedented Rise in Applications to Medical School Provides an Opportunity, but Might We Miss It?

by Adina Kalet, MD, MPH

When I entered medical training in 1978 at the Sophie Davis School for Biomedical Education at the City College of New York (now the City University School of Medicine), I signed a contract committing me to practice medicine in a medically underserved urban community. I thought I wanted to be a physician (*What did I know? I was 17 years old!)* and, compared to what I had heard about the competitive grind of the typical pre-medical pathway, the social mission of the six-year accelerated BS/MD program I was entering appealed to me. My classmates were typical inner city public college folks, over 30% of us were Black and Latino, most were from lower middle class and working poor families, and many were immigrants or first-generation Americans. As I discovered later in my training, ours was not the typical make up of a medical school class.

Medical education is never simply a straight path an individual takes toward their clearly articulated career goal. Most medical school applicants share a desire to serve others, but few have a clear idea of what that really means, much less have any specific ideas of what they want to do. Instead, medical school and residencies expose trainees to a variety of opportunities while the curricula (both the explicit and hidden) mold, shape, and guide them. There are twists and turns along the way. Career choices evolve. Role models inspire and disappoint. Exposure to challenging societal and public health issues can leave deep impressions. Outside events intervene. Powerful forces influence choices and address societal challenges.

Why are more students than ever interested in becoming physicians?

This year, even as applications to colleges and universities have been falling, *we are seeing an unprecedented 18% overall increase in the number applications to medical school*. Some are calling this the "*Fauci Effect,"* attributing the increase to the inspiration provided to young people by Anthony Fauci, the physician, scientist, director of the National Institute of Allergy and Infectious Diseases (NIAID), and voice of science and reason during the COVID-19 pandemic. When the history of this remarkable time is written, Dr. Fauci may well have a special place as the single most trustworthy public advisor of our era. With his comforting, thick Brooklyn accent, he expertly translates "science" into accessible language, giving advice to a broad national audience and demonstrating the courage to be truthful, objective, and - when appropriate - uncertain about the future. He has become the nation's physician.

Of course, there could be other explanations for the dramatic rise in applications. Perhaps a large number of recent college graduates simply have more time on their hands to complete the complex application process and study for MCATs. They are inspired by the heroism demonstrated by health professionals who - at risk to their own health and well-being - have cared unselfishly for others through their own physical and emotional exhaustion. This altruism should be harnessed and focused on what ails us.

Why it is important to improve the primary care physician work force

Today at the *Transformational Times,* we turn our attention to rural health and our regional campuses. Small cities and towns face projected life-threatening shortages of physicians over the coming decades. Despite an overall increase of 35% in the number of students graduated annually from US medical schools, the American Association of Medical Colleges (AAMC) is projecting a shortage of up to 139,000 physicians by 2033. More than two out of every five doctors now practicing will reach retirement age over the next ten years and this loss will disproportionately reduce access to primary care in rural communities.

More worrisome, and despite evidence that greater primary care physician supply is associated with lower mortality, the density of primary care physicians

has decreased by 11% over the past decade, leading to an increase in the number of deaths from preventable causes. For every ten additional primary care physicians per 100,000 population, the associated deaths from cardiovascular, cancer, and respiratory mortality dropped by 0.9% to 1.4%. Life expectancy improvement was more than 2.5 times that associated with a similar increase in non-primary care physicians. Programs explicitly focused on training, attracting and sustaining the primary care physician supply should be a national policy priority. Medical schools are an important part of this equation.

Read the inspiring interviews with Deans Lisa Dodson of MCW-Central Wisconsin and Mathew Hunsaker of MCW-Green Bay. Look at their "soup-to-nuts" explanations of how recruitment, admissions, curriculum, financial aid, and social support can intentionally address the needs of rural populations. These smaller, mission-oriented programs demonstrate there are many paths toward educating excellent physicians. We are listening to them and learning from them. As we recover from the pandemic, the seeds they have sown might offer us great opportunities to mark the beginning of a new era in medical education.

This year's unusually large and more diverse applicant pool provides us opportunities to accelerate workforce diversification. Compared to the same time last year, the number of students representing racial and ethnic minorities who are taking advantage of the AAMC's needs-based application costs is higher than ever, enriching an applicant pool with individuals from lower socioeconomic status. If, in addition, we attract more individuals who grew up in rural communities, and who are the first in their families to pursue professional education, we could begin to reverse the geographic and specially maldistributions which contribute to health disparities. Admissions committees can assemble medical school classes more likely to meet the missions of both the school and society.

Debt affects career choices …

Of course, admission criteria alone are not enough. Medical school graduates finish with, on average, a staggering $241,560 of student loan debt,

discouraging many from pursuing medical careers. Among those who do, indebtedness pressures students away from choosing lower-paid specialties even when they would find a career in primary care highly satisfying. A comprehensive set of incentives, dramatic increase in scholarship money and loan repayment, and payment and practice reform, to name a few, would be needed to dramatically improve access to primary doctors for those in rural communities.

I graduated medical school with about $25, 000 in debt, less than a third of debt typical of the newly minted physicians graduating that year, and one-tenth of typical debt today. I never took MCATs (medical school admission was guaranteed to all of us who maintained passing grades), calculus, or organic chemistry (we started with Biochemistry). And despite a great deal of initial angst *("Was I being brainwashed?"*), I enthusiastically served for ten years as a Primary Care Internist in a publicaly funded ambulatory care center on the Lower East Side of Manhattan in one of the poorest neighborhoods in New York City. No one ever reached out to confirm if I had honored my contract; they didn't have to; my education and mentors had prepared me and had ensured I would. Many, but not all, of my classmates did, as well.

Alongside the usual foundational and clinical sciences, I took a course entitled "Community Health and Social Medicine" as a college freshman; this would be called *Population Health Science* in today's parlance. Among other things, I worked in a clinic for homeless pregnant teenagers teaching basic health courses and spent a summer doing a community mapping and survey project for the Navajo Nation Health Foundation in Ganado, Arizona, a place as far from New York and as rural as one could get. The education in public health and the practical experiences I had with the people in these underserved areas opened my eyes and changed my life.

… but, so do role models

Dr. Fauci isn't so certain that he is the reason that medical school admissions are soaring. "It's very flattering," he said recently. "Probably a more realistic assessment is that, rather than the Fauci Effect, it's the effect of a physician who is trying to and hopefully succeeding in having an important impact on an

individual's health, as well as on global health. So if it works to get more young individuals into medical school, go ahead and use my name. Be my guest."

We are on the cusp of changes in medical education and this unexpected bolus of applicants provides us a unique opportunity. Our country needs more primary care doctors. Our regional campuses have experience with matriculating classes of individuals who are more likely to enter careers in primary care working in regions that truly need them. We can learn from them.

An active process is needed. We need deliberate planning and additional resources to recruit, matriculate, and support the “non-typical” medical school applicants who are statistically more likely to choose to practice in underserved areas. I think Dr. Fauci would tell us to plan, gather our resources, work together, and make a change. If we fail to act, it will be business as usual.

For further reading

https://www.aamc.org/news-insights/applications-medical-school-are-all-time-high-what-does-mean-applicants-and-schools

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