A PIECE OF MY MIND

Relationships Between Academic Medicine Leaders and Industry—Time for Another Look?

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In July of this year, I was invited to volunteer for an important phase 3 coronavirus disease 2019 (COVID-19) vaccine trial in Boston. As a semiretired physician, I was thrilled to be able to contribute to science, support my colleagues, and hasten the discovery of a vaccine to help end this terrible pandemic.

While doing background research on the vaccine and its parent company, I learned that some company executives sold extra shares of stock just as the first positive press releases came out, and then sold additional shares following publication of the phase 2 study.

As stock prices skyrocketed, these executives personally made millions of dollars. The sales (officially known as 10b5-1 plans) were not considered "insider trading" because they had been planned in advance.[1] Nevertheless, I was astounded that executives were able to reap such extravagant profits from an unproven and untested vaccine, especially during a global pandemic. It made me question the integrity of the company, if not the integrity of the trial.

The news got worse when I learned that the president of the hospital at which I work was a member of the board of directors of this company and did not resign from the board even after the hospital came under consideration (and later was chosen) as a major testing site for the company's vaccine trial. Even though the president would have no direct influence or involvement in the trial, the mere appearance of a conflict of interest was quite disturbing to me and other people who work at the hospital.

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Following an inquiry from the press, the hospital president did resign from the board of directors of the company.[2] But it begs the question why was she in this role to begin with? As president of a large nonprofit academic medical center (AMC), for which she is well compensated, her full-time job is to advocate for the health of her hospital and the people it serves, whereas the fiduciary responsibility of a member of the board of directors of a company is to advocate for the shareholders, growth, and profits of the company. The relationship didn't make sense to me.

But then it did. As a member of the company board of directors, the hospital president received a compensation package that included an annual payment as well as stock options, beginning in December 2018 (after the company went public).[3] When the value of the stocks quadrupled during the pandemic, she was able to activate 2 "pretimed" stock sales reportedly valued at more than $8 million.[3] Later, if the vaccine proved to be safe and effective, she would be able to sell additional shares and derive additional financial benefit. To her credit, after the relationship with the company was made public, she not only resigned as a director, but also agreed to divest the remainder of her stocks and reportedly intends to make a contribution to a nonprofit charity.[3] Nevertheless, the institutional and personal damage had been done.

This is not a unique situation. Ties between leaders of nonprofit AMCs and for-profit biomedical companies have been increasing for years. In 2015, a survey of 446 publicly traded US health care companies found that nearly 10% of company directorships were held by academic leaders while 41% of companies had at least 1 academic director on its board.[4] Members of the boards of directors of these health care companies came from the highest echelons of academia, including "19 of the top 20 National Institutes of Health funded medical schools and all of the 17 US News honor roll hospitals."[4]

In 2017, 12 of the 19 largest pharmaceutical and biotech companies in the world reportedly had at least 1 member of the board of directors who also served a leadership role at a nonprofit AMC.[5] These 12 companies, each worth $35 billion or more, had 22 academic health care officers on their boards, including medical school deans, hospital presidents, health center directors, department chairs, division chiefs, and other high-level leaders. Academic institutions represented on the industry boards were among the most prestigious in the country and included Yale, Massachusetts General Hospital, Johns Hopkins, and Mayo Clinic, among others. For the 18 health care leaders who served on an industry board for a full year in 2017, the average compensation package was reported to be $475 000 and average company stock holdings were worth $1.7 million.[5]

What does industry gain from these relationships? The usual answers include prestige, credibility, enhanced investment from venture capitalists, and opportunities for scientific collaboration. But companies also gain access to powerful advocates. Consider that earlier this year, the president of the hospital at which I work wrote an opinion piece arguing against efforts by Congress to regulate or lower drug prices.[6] In the article, she wrote: "In Congress, some lawmakers want to import foreign price controls. Others want to introduce price controls in Medicare. Still others

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want to allow the federal government to set prices on any medicine whose origin lies in government-funded research."[6] She suggested that such efforts pose a threat to the "innovation ecosystem" and "could eliminate the financial incentives that allow research scientists to explore new treatments" and also noted that within this innovation ecosystem, it is "small, venture-backed biomedical companies" in collaboration with top academic medical centers that often "turn promising insights into actual treatments."[6] However, the policies she advocates for in this article put her directly at odds with the welfare of her own constituents, especially patients and hospital staff, with respect to drug pricing, even as she failed to disclose her relationship with a "small, venture-backed biomedical company."

In the article,[6] she also referred to the process of drug development as "rife with failure" and therefore "incredibly risky and expensive," a rationale used by industry to justify excessively high drug prices. Yet a closer look at vaccine development at the company for which she served on the board of directors shows just the opposite. Much of the basic and preclinical research for the company's SARS-CoV-2 vaccine (including the atomic structure of the spike protein) was done by scientists at the National Institute of Allergy and Infectious Diseases (NIAID) and other academic institutions with taxpayer dollars[7]; company executives had already made millions of dollars on soaring stock prices before the vaccine entered final testing[1]; and, the US government, under Operation Warp Speed, committed $2.4 billion of taxpayer dollars to support the phase 3 trial and vaccine production.[8] It is a "no-lose" situation for the company and hardly a "risky business."

The case illustrates how serving on the board of directors for industry may be perceived as skewing the judgment and priorities of leaders of AMCs. It also illustrates in microcosm the tremendous transfer of wealth from the public (taxpayer dollars) into private corporate coffers, even as the public health infrastructure remains underfunded. By adding influential leaders of prestigious medical centers to their boards of directors, industry co-opts and steers these leaders away from becoming industry critics or progressive, vocal agents of change for a more equitable health care system.

The relationship between the biotech company and the president of the hospital in which I work was vetted and approved by the professional institutional conduct committee and the hospital's board of trustees. Perhaps the only way to avoid such potential conflicts is to completely ban leaders of nonprofit AMCs from holding outside for-profit industry directorships. This will protect them and the institutions they serve while avoiding damage to the public trust.

The COVID-19 pandemic has pulled back the curtain on the staggering racial, socioeconomic, and health care inequities in the US. It is time to ask what values individuals in the US hold as a society and what values should be expected from its leaders. I believe that leaders of AMCs should end these self-serving relationships with industry and instead become outspoken, uncompromised advocates for universal health care, affordable drug pricing, and public health above profiteering.

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