

COMMENTARY

Confronting the “Brutal Facts” and Identifying Opportunities as Pharmacy Education Weathers the COVID-19 Pandemic

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The COVID-19 pandemic has impacted almost every facet of modern life, causing almost a million deaths worldwide as well as widespread economic and social strife. While contemplating how we might emerge from this pandemic, we were reminded of the Stockdale paradox. We suggest that the Academy must not only confront the brutal facts of the current situation, but we must also maintain faith in the endgame and a commitment to prevail despite the enormous challenges we face. The Academy can play a key role in helping the world recover from this pandemic if we build on the diversity and strengths of our programs nationally and globally. We suggest that there are three key actions that pharmacists and pharmacy educators must take to show leadership in this time of need. First, we must be the voice that reassures the public about the value of science and the scientific method. Second, we must work locally and nationally to ensure an optimal public health response. Finally, members of the Academy must serve as role models with respect to the essential public health tools to prevent the spread of COVID-19. By remaining positive, keeping the endgame in mind, and confronting the most brutal facts of the COVID-19 pandemic, we are confident that pharmacy education and pharmacy will weather this storm and arise even stronger for it.

Keywords: COVID-19 pandemic, public health, economics, pharmacy education, Stockdale paradox

The severe acute respiratory syndrome coronavirus 2 (SARS CoV 2) was first isolated in December 2019, declared a Public Health Emergency of International Concern on January 30, 2020, and a pandemic on March 11, 2020.¹ To date, almost 30 million cases have been reported in 188 countries and territories, resulting in more than 936,000 deaths. The United States has documented over 7 million cases and over 200,000 deaths at the time of this writing. This accounts for approximately one-fifth of the deaths resulting from COVID-19 globally.²

The pandemic has caused widespread social and economic disruption, including the largest global recession since the Great Depression.³ Almost every aspect of our lives has been altered, with some suggesting that the pandemic could be an existential crisis for many facets of our society for many years to come. Moving forward, we must resist defaulting to old norms and begin to re-envision what our national and global economies as well as health care will look like in the future. Furthermore, we must consider the role of pharmacy in health care, and

what impacts the pandemic will have on pharmacy education and higher education. This is a tall order given the myriad number of unknowns that must be considered locally, nationally, and internationally. How we, both individually and collectively as an Academy, respond to these changing times is critical.

As faculty and administrators at US schools and colleges of pharmacy, we need to critically ask and consider our answers to key questions sooner vs later as the pandemic continues. There is a broad array of general to specific questions we must answer, including some of the following: What of value was lost due to the pandemic and how might these be carried forward? What future projections can be made about enrollments and revenues? What will be the effect of revenue changes on the ability of an institution to remain financially solvent? How can pharmacy schools better fulfill their mission of equipping student pharmacists with the knowledge, skills, and passion they need to go out and serve others given the continuing changing health care settings and community challenges? While the nature of these specific questions varies in their focus, one element that is foundational to all will be the interaction of the economy/economies with the budget of our school or college.

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While contemplating how we might emerge from this pandemic, we were reminded of the Stockdale paradox⁴ and how its associated thought process might be useful to consider given today's reality. As you may recall, Stockdale was a former naval officer during the Vietnam War who was held as a prisoner of war for over seven years. While in captivity, Stockdale endured terrible conditions, including being repeatedly tortured. To survive he knew he had to "confront the brutal facts of his situation while maintaining an unwavering faith in the endgame and a commitment to prevail, despite the enormous challenge."⁵ We posit that a similar approach will be essential in considering the future of the pharmacy profession and pharmacy education and their relationships with public health and the economy.

How the pandemic may affect the Academy is currently not well understood and almost impossible to predict. Nonetheless, several have suggested that the pandemic may result in school closures, mergers, and perhaps new partnerships. There is a sense of apprehension that the pandemic may result in more perceptions and comparisons of the differences in the quality of pharmacy education considering the number of factors that differentiate our programs (eg, established vs newer pharmacy programs, public vs private institutions, programs located in academic health science centers vs those that do not have an associated health science center, programs that are research intensive vs education intensive, and Doctor of Pharmacy (PharmD) programs that are 3 year vs 4 years in duration). If pharmacy education is to continue to advance and thrive, we must not focus on how we differ. We must, however, build on the diversity and strengths of our programs nationally and globally. As educators, we must place greater emphasis on the critical role that pharmacists play in the public health arena given the long-term effects of COVID-19 on our local, national, and global public health systems, health care systems, and economies.

The COVID-19 pandemic is the most serious health care crisis that many of us have experienced, and we are witnessing its effects on the interrelated local, national, and global economies across all sectors. Further, the pandemic is playing out against a backdrop of massive economic, political, social, and climatic instability. The current civil unrest that began in the United States in late May of 2020 and spread worldwide has added to the challenge. Already the effects of the pandemic have suggested that there will be no return to "normal" given the loss of human life and the potential long-lasting health effects that might be present in those that survive the initial infection. Pharmacy and pharmacy education are also not immune from the larger economic changes we are

seeing in our communities, nation, and the world. Economic declines and changes are being seen through community pharmacy closures, reduced hours for pharmacists, and changes in the availability of pharmacy positions in ambulatory and in-patient care settings. Nevertheless, there have been advances and successes in the ability for pharmacists to allow for expanded testing, increased immunizations, and greater opportunities for reimbursements for their clinical services as a foundation for maintaining individual health and public health through new innovative pharmacy practice models. In addition, there is still great uncertainty with the national discussion on the structure, availability, and cost of health care in the United States. Economic principles are not separate from public health or our educational programs. We must provide our current students and alumni with the opportunity to learn key economic principles and their impact on public health, health care, and health care systems, and be willing to assume leadership roles in these areas. We know that previous economic declines have had a negative impact on health through reduced financial reserves for individuals and corporations as well as fewer tools and resources for public health measures. McKee and Stuckler have suggested that the world is now entering uncharted territory with the COVID-19 pandemic where it will be important to increase our efforts on preserving health.⁶ Our local, national, and global economies will only start to improve if we focus our collective pharmacy efforts on instilling and advancing health and public health locally. By acting locally, we can impact globally on a long terms scale.

The COVID-19 pandemic has forced schools and colleges of pharmacy and each of us to address collectively and individually a new "Stockdale paradox,"⁴ complete with realities and the potential long-term impact on our professional and personal lives. However, as educators and members of the pharmacy Academy, we must embrace and demonstrate an unwavering faith in the endgame and a commitment to prevail beyond the COVID-19 pandemic by playing an essential role in promoting public health and health in our communities. There are three key areas in which we can show leadership within our communities during the time of the COVID-19 pandemic and beyond. As educational programs founded on the pharmaceutical, biomedical, clinical, and social-administrative sciences, we must be the voice that restores our communities' faith in the contributions and value of science, the scientific method, and the importance of clinical trials in the development of safe and effective drugs and vaccines. In the words of United Nations Undersecretary-General Fabrizio Hochschild, the world's capacity to get through the COVID crisis will depend on

two things- science and international cooperation. “Where international cooperation works and countries come together, lives will be saved. Where the lessons of science are respected, lives will be saved.”⁷ Public distrust in science has already undermined the efforts of scientists in their fight against climate change and has also discouraged cooperation during other public health emergencies such as that seen during the 2018 Ebola outbreak in the Democratic Republic of Congo.⁸ Indeed, for several decades, there has been a growing campaign to foster distrust in science, funded by industries and libertarian think tanks whose interests and ideologies may be at odds with the findings of modern science. We, as pharmacists and pharmacy educators, must play an important role in helping to point out the significance of science to society. This task is important since distrust in either government or science can impede the flow of credible information and accountability. Building greater trust in science will require cooperation between politicians, educators, and researchers to work together to identify sources of bias and put suspicions to rest.

Second, we as pharmacists and educators need to be aware of how our advice and instruction can have practical implications with respect to public health. In the case of the COVID-19 pandemic, this may require working with community leaders to produce directives for social distancing, contact tracing, and other measures based on local contexts. More broadly, we may need to interactively engage with communities to clarify potential misinterpretations of their findings and recommendations. This is critical, given that large segments of the public may not have a good understanding of what constitutes “credible and legitimate” research. Pharmacists can and should play a key role in vaccinating as many individuals as possible against influenza as well as in the implementation of any future national vaccination for COVID-19.

Third, until the time a vaccine is readily available across all our communities, pharmacy educators, student pharmacists, and alumni must serve as role models in our communities with respect to using essential public health tools to prevent the spread of COVID-19. We must demonstrate how simple actions, such as wearing masks, social distancing, handwashing, and avoiding large gatherings, are important steps toward reducing community spread. This will not be easy for many of us, as some of the most valued attractions and benefits of working in a university setting is the interaction with students and colleagues and participation in all the activities associated with campus life. Yet, with small changes and modifications in how we do our

work as educators, we will be successful during and after the COVID-19 pandemic.

As an Academy, we have already collectively weathered major trials, such as transition to the PharmD as the entry-level degree, the evolving clinical role of pharmacists, and the ever-challenging structure of the health care system. By remaining positive, keeping the endgame in mind, and confronting the most brutal facts of the current COVID-19 situation, we know the talented and committed faculty members, staff members, student pharmacists, pharmacists, and friends of pharmacy will weather this storm and arise from it even stronger. We all need to remember the important advice of the British writer Vivian Greene: “Life isn’t about waiting for the storm to pass...It’s about learning to dance in the rain.”⁹

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