

Modifying Pharmacy Enrollments by Employment Realities

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Abstract

Objective: The objective of this commentary is to consider the fluctuations in pharmacy school enrollments and to review some of the strategies employed in other health care professions, as well as to consider policies that might lead to a closer balance between admissions to PharmD programs and employment opportunities. This balance provides job stability, decreased underemployment, and greater attractiveness to study pharmacy. *Discussion:* Pharmacy school entry requirements have been relaxed to enroll as many students as possible due to current declining applicant numbers. As a result, there are more pharmacist graduates than there are available jobs each year. As a result, the job outlook for pharmacists may go down in the future unless action is taken. Stricter entry requirements could help produce a higher quality pharmacy workforce in the future and relieve this disparity. *Summary:* Pharmacy schools try to accommodate as many students as possible, which can create a job disparity between the number of available jobs and pharmacists seeking work. Suggestions can include stricter entry requirements, certificate of need programs, required fellowships and other means to balance this misalignment.

Keywords: Pharmacy Enrollment; Employment; Supply and Demand

Introduction

Nearly all goods and services suppliers have the capability to expand or contract their output to be in sync with demand.¹ Starbucks had opened over 1,000 stores by 1996, but within five years that number had dramatically increased to nearly 5,000 and tripled again by 2007, in order to match demand and competition.² By the end of August 2024, Walgreens is expected to close 150 stores in the United States as part of its cost-cutting effort and plans to optimize technology to further drive savings, according to Walgreens Boots Alliance CFO James Kehoe.³ These actions make perfect sense for suppliers who are trying to match demand. If a company manufacturing flat panel televisions produced 100,000 more units than the market could absorb, the impact of that situation could likely be to offer deep discounts and sales to gain as much revenue as possible under the circumstances. But, selling the excess at deep discount prices will likely harm prices the manufacturer can charge in the coming months or year.

Pharmacists face the challenge of an expected decline of job availability. There are 14,000+ pharmacists graduating every year with an expected 3% increase in pharmacist employment from 2022 to 2032.⁴ One way, among others, to achieve a better balance between pharmacist graduates vs. the pharmacist employment market is to implement a stricter set of entry requirements, in order to limit the number of enrollments. If no action is taken, there could be dire consequences for PharmD programs and pharmacy job prospects in the future.

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Background

Optimally, the number of Pharm.D. graduates should be close to the number of position vacancies, but this is not often the case.⁵ According to the Student Loan Planner, the percentage of applicants being accepted has increased since 2003, with acceptance rates being over 80%.⁶ Private pharmacy schools endeavor to increase enrollments to the maximum of their recruiting abilities, since about 90% of their operating budgets come from tuition payments.⁷ This enrollment boom has been compounded by the fact that after 2006, changes in the PLUS program allowed students to take out unlimited loans to attend pharmacy schools.⁸ We believe that the higher acceptance rate could be partly due to the fact that PCAT scores are no longer required for admission to pharmacy schools in the United States. Simultaneously, data from the US Bureau of Labor Statistics show that the job outlook for pharmacists is expected to increase by only 3% between 2022-2032.⁵ The demand for pharmacy jobs started to flatten around 2008, but the number of PharmD graduates has continued to increase.⁹ This is not a beneficial situation with the schools, essentially are recruiting PharmD students without any knowledge of what nearby schools are doing in their recruitment activities.

It is said that stability occurs when an equilibrium is reached with supply and demand.¹⁰ When the number of pharmacy graduates entering the job market exceeds the number of pharmacist openings or vacancies, salaries for pharmacists in certain settings or regions will have to adjust and potentially decline due to the laws of supply and demand.⁶ Fewer pharmacist job openings and too many unemployed pharmacists looking for jobs can cause income to stagnate or even go down.⁴ When schools produce a surplus of pharmacists, employers may be able to offer lower salaries, and graduates might find that it would be in their best interest to apply for residencies, which may offer better training, but start at a much lower salary.⁴ According to the BLS, about 13,600 openings for pharmacists are projected each year over the next

decade.⁵ This can be problematic as the schools in the US have more graduates than predicted job openings. In 2020, according to the National Association of Boards of Pharmacy (NABP) a total of 14,081 graduated from ACPE accredited programs.¹¹ The numbers of graduates did decrease in 2021 (13,935) and 2022 (12,548), perhaps due to COVID,¹² This might lead to lower enrollments in the near future causing a pendulum effect. This is seen in fields where excess capacity leads to production decreases and then shortages, which leads back to expansion, and the cycle continues.¹³

Discussion

It can be difficult to pinpoint the best strategies to build stability into pharmacy education and attempt to match supply of new graduates with the societal demand. Nonetheless, below are some possible alternative solutions. One suggestion is that the American Association of Colleges of Pharmacy, (AACP), the trade association for the nearly 140 accredited U.S. pharmacy colleges could establish a voluntary program of limiting enrollments, based on the number of last year's graduates who obtained full-time employment as pharmacists.¹⁴ Clearly, a mandatory program to allocate graduating numbers would run afoul of the US Federal Trade Commission as anti-competitive and be in restraint of trade. Dr. Lucinda L. Maine, past executive vice president and CEO of AACP, when contacted by telephone said: "It is not a feasible recommendation to ask the AACP to communicate a voluntary reduction because it's happening already, and it is happening to sustain quality but at a tremendous cost. Not only does it border on anti-trust by trying to play with the number of schools and seats, but they are also cautioned that they are getting dangerously close to anti-trust." Dr. Maine predicts that there will be another national shortage of pharmacists, but she is not sure about the timing, magnitude, or what will largely drive this. (Lucinda L. Maine, Ph.D., R.Ph., phone call, November 2022)¹⁵

Others have suggested that the National Association of Boards of Pharmacy should or could have this responsibility, but there is no known mention by the organization to become involved in anything like this. Dr. Lemrey Carter, an NABP representative when contacted by telephone said: "There needs to be a close look at the supply and demand aspect of the career". He believes this issue will always be cyclical unless the roles of a pharmacist change to adopt a different pharmacy model (Lemrey Carter, MS, PharmD, R.Ph., phone call, November 2022). He believes promoting the career and advocating for provider status will help change this mismatch in pharmacist supply and demand.¹⁶

Some other methods to rationalize PharmD supply and demand have been suggested, but they do not appear to be viable long-term solutions. For example, some have suggested that colleges should try to provide opportunities beyond the conventional paths of hospital or community pharmacy.¹⁷ Others have proposed requiring all graduates to undertake post-graduate

residency training.¹⁸ Still others believe that the entire pharmacy profession must make job creation the number one priority with a focus on financially sustainable patient care responsibilities.¹⁹ These suggestions might prove to help with either lowering pharmacy enrollment rates to allow higher quality students or increasing the prospect of future job openings for pharmacists, but they don't cover all the issues involved. There is no mandate for schools to follow any of these strategies.

It should be noted that GPA scores of accepted students have declined over the years.²⁰ Many schools are becoming less selective in their choice of students to compensate for the number of applicants dwindling.²¹ This will likely lead to a decline in the quality of those pharmacy schools, ultimately hindering the pharmacy workforce post-graduation.²² The number of pharmacy school applicants may be dwindling due to the looming enrollment cliff anticipated in the U.S. for 4-year colleges.²³ U.S. institutions are battling a consistent decline in birth-rate, while simultaneously being confronted with a new decision-making process adopted by the near college-aged generation. This newer generation believes that college is too expensive and therefore are making alternative decisions for their education, resulting in a 23% decrease since May 2020 of students that are considering attending a four-year college.²⁴ A significant change or new strategy must be implemented in a way that benefits the profession of pharmacy through more than just suggestions alone.

Suggested Solutions

It has been suggested to focus, perhaps, on the creation of an organization or call upon an already existing one to rationalize enrollment to demand as their responsibility to minimize and control enrollment issues.²⁵ This can be done through the U.S. Department of Health and Human Services to make a regulation that schools must modify enrollment numbers to match the local demand for new PharmD graduates. We can also call upon the U.S. Department of Education to deny loans or grants to schools that do not show evidence of modifying their enrollment rates to adjust to the demand for new PharmD jobs. Another possibility is to create an organization of health professions leaders from AACP, APhA, ASHP, NABP, and ACCP to monitor the demand and suggest enrollment changes to better balance the number of new PharmD graduates to job availability for these new graduates. This was somewhat addressed through the 2013-2015 American Association of Colleges of Pharmacy (AACP) Special Committee on Admissions, which was tasked with examining the current admissions practices used by pharmacy schools, to evaluate and make recommendations on how schools can holistically assess admissions and the type of students they can enroll.²⁶

We need to monitor and control the enrollment rate to match the demand rate for new PharmD graduates.²⁵ This will also force the schools to consider selecting higher grade students for

enrollment, in order to have the highest graduation rate, which in turn creates more skill-based PharmD graduates to enter the job market and pushes us closer to provider status, which can further improve the job market for future pharmacists. Creating a predictive enrollment model was found to be an effective enrollment management technique by Burkhardt, who studied the admission of medical school students through numerous factors that are relevant to their admission.² These factors can include competitiveness of a student's application, but rely on other factors, such as gender, financial aid offer, undergraduate grade point average, their Medical College Admission Test (MCAT) score and admissions committee score (ACS).

It is true that many or even most projections about future job market conditions for various occupations have been inaccurate because the future cannot be precisely predicted due to disruptive and destructive events. One such event was the COVID-19 crisis, which might have pushed pharmacists' roles to be more noticeable, but may have burned out many pharmacists, who will leave or retire soon from the role. As a result, the COVID-19 pandemic may create vacancies for future pharmacists to assume. This would greatly benefit pharmacists graduating from now till 2030, but doesn't solve the decreasing employment rate. Therefore, an enrollment cap might be beneficial in the long run for the profession of pharmacy. An example comes from the University of California, Berkeley, which had admitted too many students causing overcrowded housing and classroom conditions.² The legislature mandated an enrollment cap that would be enforced by the budgeting process and, while not looked upon favorably, by the University, the decrease in enrollment rate was necessary in order to reduce overcrowding at the school. A lower budget and enrollment forced the school to become more efficient at using its resources and budget appropriately, while accepting students at a higher standard, in order to keep their graduation rate up, which can produce higher and more qualified workers once they graduate, which benefits the school. Perhaps the U.S. Department of Education might be able to impose entrance limits for each college just as the Drug Enforcement Administration (DEA) allocates production caps to US narcotics manufacturers.

Some other possible pathways to rationalize supply and demand for PharmD graduates include a Certificate-of-Need type policy with zero-based budgeting requiring each school to defend its enrollment goals by demonstrating unmet need for pharmacists in its area. Another potential tool would be requiring a 1- or 2-year residency or fellowship following graduation to be eligible for licensure. All these possible avenues have consequences. For example, requiring a fellowship would require study for 7 or 8 years, possibly making medicine or dentistry more attractive. Any new interventions should be carefully studied and evaluated to make certain that we do not make matters worse.

Conclusions

While data from the National Center for Biotechnology Information (NCBI) show a decrease in PharmD graduates from 2020 to 2022,¹¹ which can be attributed to the Covid pandemic, prior to 2020, there was always an increase in graduates from accredited pharmacy schools. We can expect graduating student rates to go up but the issue of the slow job growth, can hinder future job openings for pharmacist.⁷ Suggestions include creating organizations or groups to oversee and make recommendations on the number of enrollment or allocate budgets according to enrollment. With lower enrollment and stricter entry into programs, it may be possible to see a significant improvement to PharmD graduates and a better match of supply and demand for pharmacist jobs. The sustainability of the pharmacy world will depend on how pharmacy schools handle the influx of students.

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