



Am J Pharm Educ. 2010 December 15; 74(10): 185.

PMCID: PMC3058448

From Shortage to Surplus: The Hazards of Uncontrolled Academic Growth

[Daniel Brown](#), PharmD[✉]

[Author information](#) ► [Article notes](#) ► [Copyright and License information](#) ►

This article has been [cited by](#) other articles in PMC.

Take yourself back in time just 10 short years to an imaginary meeting at an imaginary place. You have been appointed to a special AACP blue-ribbon panel to study what the academy can do to address the pharmacist shortage. It's the year 2000. We've just gone all PharmD. There are about 80 schools of pharmacy in the country, and roughly 7,000 graduates enter the workforce every year—but it's not enough. One outspoken member of the panel proposes that the academy add about 50 new schools of pharmacy over the next 10 to 15 years. As you almost fall off your chair, another member chimes in to suggest that 50 new schools will not be sufficient and that most of the current programs should either increase enrollment or establish new satellite campuses. Would you have thought they were out of their minds, or at least been a bit dumbfounded by the overly aggressive nature of their proposals? Is it reasonable to assume that if 80 schools are not quite meeting the demand, we must need 130?

You can stop imagining now. It's 2010, and as absurd as it sounds, those imaginary proposals are being enacted before our eyes; but no one seems to be alarmed. Indeed, truth is sometimes stranger than fiction.

As a pharmacist practitioner and academician whose career spans the last 3 decades, I appreciate the depths of the pharmacist shortage that has plagued our profession. I personally spent many a day, first as a director of a hospital pharmacy and then as a dean of a school of pharmacy, exasperated by the seemingly impossible task of recruiting qualified candidates to fill long-standing vacant positions. I understand the law of supply and demand, as well as the powerful market forces that fueled the pharmacist shortage for so many years. And now, findings of the Pharmacy Manpower Project notwithstanding, here I am in the year 2010, utterly in awe at how dramatically and how suddenly conditions have changed. It is time for all of us in academia to step back and objectively assess what's happening to the pharmacy job market on the ground and in real time. Sometimes it is best to set aside the weather report and look out the window. Long-held assumptions about the rate of pharmacist job growth are beginning to crumble amid the uncertain health care and economic realities of our times, and yet we, as an academy, continue to perpetrate a rate of unprecedented growth that has reached alarming proportions and shows no signs of abating.

In many areas of the country the number of pharmacy graduates is beginning to match the number of vacant pharmacist positions. That observation in and of itself is a good thing and should be no cause for alarm. But the growth of PharmD programs does not appear to be acutely responsive to the marketplace. Growth marches on without restraint though it is no longer warranted. The pharmacist shortage has been diminishing in recent years, despite that many new PharmD programs have not yet graduated a class and the expansion of many existing programs is not yet reflected in the number of their graduates. Understandably, rates of increase in the number of graduates reflect a 4-year lag period from the point of creating or expanding a program. Here in Florida, the primary pharmacist employers filled their vacancies this year and some graduates were forced to seek employment outside the state. One Florida pharmacy school will graduate its first class next year and the University of South Florida is currently pursuing plans to start a PharmD program. It begs the question, "What problem are we trying to solve by continuing to expand?"

Florida is not alone. One need only look at what is happening in California, Texas, New York, Tennessee, Ohio, Illinois,

North Carolina, South Carolina, Georgia, Pennsylvania, etc, to see that growth within the academy is getting out of hand. Make no mistake, this is not just a matter of concern for a select group of states; it is a national problem, the repercussions from which no one in pharmacy will be immune. The number of programs listed by ACPE suggests an approximate 50% increase over the past 10 years. But the “official” number of ACPE-accredited programs does not capture the full extent of growth. ACPE often counts satellite campuses as part of a single program, even when the satellite campus is in a different state. A simple count of programs does not reflect the increase in the number of graduates from schools that either added a nearby satellite campus or simply expanded class size at the main campus. Clearly, the most meaningful measure of growth is the total number of graduates.

The annual number of pharmacy graduates increased from 7,000 in 2001, to 8,268 in 2005, to 10,988 in 2009.¹ That's a 57% increase in only 8 years. More alarming is the 33% increase from 2005 to 2009. What is still looming on the horizon is likely to exacerbate the situation even further. Seven new colleges/schools graduated their first class in 2010, 3 more will graduate a first class in 2011, 9 in 2012, 5 in 2013, and 6 in 2014. That is 30 new programs contributing to the pool of graduates within a 5-year period. Using a conservative estimate of 70 for the average class size of these new programs, the number of graduates in 2014 projects to be over 13,000, not including graduates of existing programs that are still increasing enrollment. The number could easily surpass 14,000 when all is said and done—a literal doubling of the academy's production capacity in just 13 years. At last count, at least 10 other institutions have reported plans to establish new PharmD programs in 2011 or 2012, pending ACPE approval. Those of us with faculty appointments are capable of doing the math. One need not be a statistician to recognize the looming mismatch between the number of graduates and the number of vacant positions in the not-too-distant future.

Some might suggest that the growth in the number of graduates will be compensated by new jobs created in response to factors such as “baby boomer” health care demands, Medicare Part D medication therapy management services, general improvement in the US economy, pending pharmacist retirements that were temporarily put on hold, or expansion of pharmacy services as part of the recent health care reform. All of these factors could make a difference, but will the growth of jobs be of a sufficient magnitude to offset the massive growth in the number of pharmacy graduates, and will new jobs develop at a commensurate rate to meet the ever-increasing supply of job seekers?

The academy needs to face the fact that in successfully resolving a legitimate manpower shortage, it has overzealously exceeded the target by such lengths that we are well on our way to creating a manpower surplus. The shortage called for sensible growth, with ongoing assessment and responsive adjustment. What should have resembled a moderately paced jog in the park wound up being more akin to the “running of the bulls.” Rather than pursuing a course of measured, controlled expansion, we are in the middle of a wild stampede with growth run amok. It cannot continue this way without the academy and the profession experiencing damaging repercussions.

It is true that whether we do something about the problem or not, it will eventually correct itself. Market forces tend to reverse such overcompensations, but that can be a long, slow, and painful process. It would behoove us as an academy to be proactive and take rational corrective measures. The PharmD production engine has already become a behemoth that is not amenable to downsizing or dismantling. The academy may not possess a tranquilizer gun powerful enough to stop this monster in its tracks, but perhaps we can find a way to slow it down.

I am not suggesting that existing programs should be prohibited from expanding or that colleges/ universities should not be allowed to start a new program. Thankfully, institutions have the right to establish a pharmacy program if they chose, but with rights come responsibilities. We cannot expect institutions to take responsible actions if they are basing decisions on incomplete or inaccurate information. Institutions pondering the addition of a PharmD program should be encouraged to consider more than the current demand of applicants seeking entry into pharmacy school. Careful consideration also must be given to the future pool of graduates who will be seeking employment in a job market far different from what has been promulgated in recent years. When the outlook becomes bleak for job-seeking graduates, the applicant pool will dwindle accordingly. The same market forces that fueled the popularity of pharmacy for so many years can quickly turn against it. Large student loans and years of intense study are much less palatable when there is no longer the guarantee of a high paying job.

Those most impacted by a pharmacist surplus will be practicing pharmacists, who will most likely experience negative salary pressures and less job flexibility; new graduates, who might not be able to find suitable employment; and colleges and schools of pharmacy, which are likely to find the vast pool of applicants rapidly evaporating in response to the adverse changes in the marketplace. No doubt, the fittest programs within the academy will survive, but at what cost and with what level of suffering? The academy is already affected by a dilution of quality in student applicants, faculty members, and administrative leaders, which is characteristic of any industry plagued by an excessive rate of growth.

Our unprecedented growth could also have far-reaching implications for the profession as a whole. Plans for the expansion of, and reimbursement for, pharmacist delivery of direct patient care services will not be served by flooding the marketplace with an oversupply of PharmD graduates. A sizeable surplus of pharmacists is the last thing we need at this point in the clinical development of our profession. Reason, common sense, and an appreciation for the greater good of pharmacy must prevail. To continue a course of blind, uninhibited growth is to risk generating a manpower catastrophe before the end of this decade that could damage the profession of pharmacy well into the future, possibly even causing irreparable harm.

The leaders of all major pharmacy organizations should publicly address this issue and urge institutions to carefully reassess any plans for expanding or creating a PharmD program. Institutions unquestionably have the right to proceed as they see fit, but having the right to do something does not mean it is the right thing to do. Our leaders need to bring forth a clarion call for sensible restraint and self-regulation on the part of academic institutions, at least until PharmD program growth that has already occurred can be better assessed. Granted, there is no regulatory body in pharmacy with authority over academic growth, and institutional sovereignty must be respected, but that should not stop our leaders from simply saying what needs to be said and encouraging rational thought within the academy concerning out-of-control expansion. Somebody needs to stand up and speak out in the interest of our profession before it's too late.

REFERENCES

[Go to:](#)

1. Number of Pharmacy Degrees Conferred 1965-2009 by Degree and Gender. American Association of Colleges of Pharmacy. http://www.aacp.org/resources/research/institutionalresearch/Documents/Fall%202009%20PPS/Fall09_PPS_DegConf.pdf. Accessed November 17, 2010.

Articles from American Journal of Pharmaceutical Education are provided here courtesy of **American Association of Colleges of Pharmacy**