

LETTERS

The Inadequacy of the 4-Year Bachelor of Pharmacy Degree Program in India

To the Editor. Pharmacy education has reached a serious crossroad in India today in spite of coming a long way from the time of its inception, albeit in a totally different form in 1860.¹ Faced with the mounting challenges of relentlessly advancing technology, the current 4-year program for the bachelor of pharmacy (BPharm) degree is looking increasingly inadequate. I often reserve a favorite quote which I use whenever I am confronted with matters that pertain to modern education in general: "Time, tide, and technology wait for none."² Indeed, there is a nonstop drive that new technology exerts on modern education in general across all realms. And with that comes the added pressure on higher institutions of learning to keep up with what I term as the leading front of technology both in terms of teaching as well as research.

One can already see this phenomenon in the field of software where things that are current and happening today become outdated in no time and thereby put pressure on both academia and the industry to keep pace. Similar trends are seen in other fields, especially in pharmaceutical education. And this mantra of keeping up with the march of technology really telescopes for pharmacy as it is a multidisciplinary profession encompassing specialty areas like pharmaceuticals, pharmaceutical chemistry, pharmaceutical analysis, pharmacognosy, pharmacology, pharmacy practice, pharmacy law, microbiology, biotechnology, mathematics and statistics. And by all accounts, the advances of new knowledge and technology in all of these realms have been colossal to say the least.

Modern pharmacy educational institutions have to make sure that they inculcate the latest advances in all these areas to their undergraduates in order to make them viable for employment on completion of their degrees. Undergraduates in pharmacy need to be subjected to rigorous coursework in all these areas so as to equip them for fruitful careers after graduation. In this context, the existing 4-year degree programs in Indian pharmacy colleges seem grossly inadequate, the consequences of which are already being manifested. Today most Indian pharmacy graduates end up in pharmaceutical marketing jobs in the

Indian pharmaceutical industry with very few of them making it to other areas like manufacturing and research which demand nothing less than a master of pharmacy (MPharm) degree in a specialty area like pharmaceuticals or pharmacology or pharmaceutical chemistry. Those BPharm graduates who do make it to manufacturing and research jobs in the Indian pharmaceutical industry receive inadequate pay, with only a few exceptions here and there. This has led to fading relevance of the BPharm degree in India, especially when it comes to employment. The current syllabus across the nation (with some minor exceptions) does not cater to the latest advances in the field and is rapidly getting outdated, making it mandatory on pharmacy undergraduates pursuing a career in the industry to finish a postgraduate degree. This really challenges the notion that the pursuit of higher education should be for the sake of higher education and not something that is thrust upon students due to the march of technology. In this light, it would be either prudent to increase the course content in the prevalent 4-year course or increase length of the pharmacy undergraduate program in India to a minimum of 5 years or even 6 years to accommodate more current and relevant course material that would go to enhance the potency of the Indian BPharm degree in terms of employment viability. The former option of increasing the course load would eventually lead to a point of diminishing returns with time; hence, the latter option of increasing the duration of the course makes more sense. Since ancient times, pharmacy has been a profession that has had a considerable sphere of influence in the workings of human society. Therefore, in order to maintain that influence and relevance, pharmacy education needs to move with the changing times and technology. In the case of India, it is imperative that swift changes are made to the curriculum, else the profession risks fading into irrelevance in the not so distant future.

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