

The Pharm. D course of PCI: Is the country ready for it?

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ABSTRACT The introduction of the Pharm. D course by Pharmacy Council of India, in 2008 has initiated a heated debate in the Indian healthcare sector. A group of professionals have passionately supported the introduction of the course, whereas a significant lobby opined that it would be an ornamental degree for which there is no job market. In spite of this debate, a number of private sector institutions of South India have started offering the course. In this article, we have compared the salient features of the Pharm. D course with that of the traditional B. Pharm course and the prospective employment opportunities of the Pharm. D professionals. The article also gives a detailed analysis about the prospects of the Pharm. D course with respect to global economic factors that is affecting the Indian healthcare scenario.

Keywords: Pharm. D, B. Pharm, Pharmacy Council of India, Job market

Introduction

The pharmacy profession marked its entry in India almost at the same time as in the United States back in the 18th century but did not register an impressive growth rate for the first half of the century. The first course in pharmacy education in India was introduced with the start of the B.Pharm course in Benaras Hindu University in July, 1937¹. Since then, in terms of social status and importance, the profession has already registered a topsy-turvy growth curve. There has been a steady increase in the number of Indian institutions offering various pharmacy courses including Diploma in Pharmacy, Bachelor in Pharmacy, Masters in Pharmacy as well as Doctorate in Pharmacy. The number of students opting for the above mentioned courses have also increased, especially the number of aspirants for higher education in pharmacy including M.Pharm and PhD degrees have gone up impressively². But, in the recent years, the admission status of various institutions offering pharmacy courses tells a different story. The admissions to undergraduate courses (B. Pharm and D.

Pharm) have fallen down drastically. Nearly 40 percent seats are lying vacant both in undergraduate and postgraduate courses across the country³. The job market for the pharmacy students has also presented a grave picture in recent years. In this scenario, the introduction of Pharm.D course by PCI in 2008 has raised a host of questions⁴. Throughout the country there is a debate whether this is an impulsive move by PCI to create a bunch of professionals for whom there is no job market. We would like to analyze that question in this article.

What Pharm. D is and how is it different from B. Pharm?

A Doctor of Pharmacy is a professional doctorate degree in pharmacy. In some countries, including the US, it is a first professional degree, and a prerequisite for licensing to exercise the profession of pharmacist. The degree is designed to train the students with scientific and technical skills to be utilized for one to one interaction with patients ensuring rational drug therapy⁵.

The Pharm.D degree program requires at least 2-years of specific preprofessional (undergraduate) coursework followed by 4-academic years (or 3-calendar years) of professional study. Pharmacy colleges and schools may accept students directly from high school for both the pre-pharmacy and pharmacy curriculum, or after completion of the college course prerequisites⁶.

Both B. Pharm and Pharm. D are the registrable qualifications for practicing pharmacy profession under the Pharmacy Act. B. Pharm is a 4- year course and Pharm. D is 6-year course including one year of clinical internship.

Pharm. D emphasizes on the practice component of pharmacy like Hospital & Clinical Pharmacy, Community Pharmacy, Clinical Research, whereas B. Pharm is industry oriented. A Pharm. D professional would be able to prefix "Dr." to his name for the purpose of practicing pharmacy profession (under Pharmacy Act), whereas a B. Pharm graduate cannot do the same⁷.

The Present Scenario of the Pharmacy Profession in India

At this moment according to the report of Pharmacy Council of India there are about 382 institutions offering pharmacy courses in India⁸. Nearly 30,000 B. Pharm graduates are added to the job market every year⁹. A fraction of these B. Pharm graduates pursue the higher degree like M. Pharm and PhD and adopt teaching and research as the career option. Pharmaceutical industry is the main provider of jobs for the rest. Pharmaceutical industries absorb these graduates mainly under three divisions: Production, Quality Control and Marketing of pharmaceuticals. However the salaries offered by most of the Indian owned companies are less than lucrative. One of the reasons for this scenario is that the Indian pharmacists do not have an assured domain for jobs. The science graduates, especially the ones with chemistry background are allowed to enter the profession with a bit of training, whereas

a pharmacy graduate is not allowed to work in the general stream.

The Prospect of Pharmacy as a profession

Pharmacy is a professional course and the main support base for professional education is the middle class¹⁰. So, to analyze the prospect of pharmacy education in India, we must take into consideration the viewpoint of an average middle class Indian. For him/her, the career decision is primarily influenced by two factors—earning potential of a profession and the social status.

Earning Potential

In the age of globalization, outsourcing in healthcare industry has become common. A sizeable portion of outsourcing money is invested in India. Over 100 Indian pharma manufacturing sites have US FDA approval to manufacture drugs that can be sold in Western markets³. Naturally this has created impetus for both the pharmaceutical industry as well as pharmaceutical education. State or centrally sponsored pharmacy colleges are few, but private sector has responded to this factor overwhelmingly. Though the average earning power of an Indian pharmacist is seeing a falling trend, a significant number of young people are opting pharmacy as a profession.

Societal Factors

However, the second parameter that is the social status awarded to a profession, results from the long-term psychological conditioning. Social respect of a profession usually goes up when it's in a position to directly interact with society. Pharmacists working in the industry interact with the society through a product designed or evaluated by him. His is a faceless profession. Although an important constituent of the healthcare sector, pharmacy is yet to establish an identity in India, as a profession. Hence, the addition of the Pharm. D to the repertoire of pharmacy degrees has become a debatable issue.

The Debate

The main proponents of the course argue,

- To be successful, the pharmacy profession needs to be clinically oriented. To be recognized as a health professional like a doctor or nurse, a pharmacist should be in direct contact with the patient and take active part in therapy.
- In the United States, the pharmacist is an active member of the healthcare team and plays a prominent role in medication management as retail, clinical and hospital pharmacists. To get entry into these professions, one must have a Pharm.D degree.
- U.S schools no longer offer the traditional Bachelor's degree and Pharm.D has replaced it. The US Bureau of Labor Statistics had predicted that job opportunities of the pharmacists would rise by 17 percent by 2008 to 2018¹¹. So the Pharm. D course is necessary to take advantage of the US job market.
- Though worldwide doctors are the leaders of the healthcare team and earn higher salaries than pharmacists, the cost of medical education is enormous. According to US Bureau of Labor Statistics, mean annual wage of physicians ranges from 80,390\$ to 2,19,770 \$, whereas that of pharmacists is around 106,630\$¹². The average cost of earning a Pharm. D degree is comparatively low compared to a degree in Medicine (10,430-23,279\$ for Pharm. D degree against 17,668 – 34,499 \$ for a degree in Medicine) making it an affordable career option to many of the students¹³.

However the critics of the course too have a number of arguments in their repertoire. Their argument goes in the following line:

- With years of sustained effort, the B. Pharm and M. Pharm Degree holders of India, have managed a foothold in the pharmaceutical industries, mainly in manufacturing, quality control and

marketing. A Pharm. D professional won't be suitable for those roles.

- In India, the role of the clinical/hospital pharmacists is ill defined and the job opportunities in the private hospitals are negligible.
- India is a developing country with a very low annual income. Majority of the Indian population depends on the publicly funded hospitals for treatment. Inclusion of another expert in the healthcare team will substantially increase the cost of treatment, which may not be affordable by most of the State governments.
- The Community Pharmacy service is basically a private sector and the extra expenditure for employing a community pharmacist won't find favor with the business owners.
- To practice in the USA, a pharmacy professional has to clear Foreign Pharmacy Graduate Equivalency Examination (FPGEE) and North American Pharmacist Licensure Examination (NAPLEX) which is conducted by National Association of Boards of Pharmacy (NABP) to assess individual's competency and knowledge for the job. However there is no such test in India to assess the Pharm. D professionals. Further, it is not clear that whether the Pharm. D graduates of India would be eligible to be registered to practice in US¹⁴.
- To properly train a Pharm. D professional, an institute should have elaborate infrastructure like 300 bed hospital and expensive faculty, making the course more expensive than traditional B. Pharm course. In terms of remuneration, the degree may not be cost effective.
- Introduction of the Pharm. D degree will be one more attempt to blindly mimic the western countries. In India, Pharm. D will be an ornamental degree without having any real significance.

Finally, it is not clear whether the PCI has done any man-power requirement study for the placement of Pharm. D graduates when the first batch would come out in 2014³.

At the first sight, the number of negatives outbalances the number of positives. Yet a number of Indian institutes (like J.S.S College of Pharmacy, Ootacamund, S.R.M College of Pharmacy, Kattankulathur, Tamil Nadu, etc) have started offering the Pharm. D course and quite a sizable number of students have taken admission into it¹⁵. Mostly private sector/institutions in the southern states of Andhra Pradesh, Karnataka, Tamil Nadu and Kerala have started the Pharm. D programmes. By 2020 there will be 20,000 Pharm. D degree holders available for professional jobs³. This clearly reflects an active interest towards the Pharm D course among the young generation of India.

The Changing Factors

Medical tourism and JCI requirement

Presently, the pharmaceutical sector of India is undergoing a silent transformation. In the last decade there is a phenomenal rise in the private hospitals in almost all the cities of India. Some of the hospitals have developed infrastructure, comparable to that of the speciality hospitals of the developed world¹⁶. These hospitals charge a negligible fee compared to the US hospitals. The fees for a heart surgery ranges from 2000-6000\$ in an Indian hospital whereas the same is more than 1,00,000 \$ in US hospitals¹⁷. Naturally Indian hospitals are attracting more and more patients from abroad and medical tourism has become a buzz word in the economic planning. Since, in the matter of healthcare, the safety considerations are of prime importance, the foreign patients usually opt for hospitals that have JCI accreditation, which certifies the hospitals for their standard of treatment outside the USA. Hence more and more hospitals are vying for JCI accreditation to have an edge over the others. One of the JCI requirements for medication use process is the 'prospective audit of the medication orders for appropriateness' by trained

professionals prior to drug administration. Clinical pharmacists are the ideal professionals for the job and in absence of this manpower the Apollo Group of Ludhiana, had to go all the way to design a programme to train the existing B.Pharm graduates with clinical pharmacy training¹⁸. So it can be safely said, JCI accredited hospitals of India will be a potential job opportunity for the Pharm.D professional.

Clinical Research Agencies

Thanks to globalization many of the multinational pharmaceutical companies like Eli Lilly, Aventis, Novartis, AstraZeneca, Pfizer, Johnson & Johnson, Merck, Bristol-Meyers-Squibb and GlaxoSmithKline have set up their clinical research operations in India. The clinical trial business is up by 10 percent as these trials cost 44 percent less as compared to US-based trials. It is expected that 50,000 job opportunities will be created for clinical research operations, where Pharm. D professionals can have a bright job prospect³.

Medical insurance

The rising cost of treatment has forced the Indian middle class to adopt medical insurance. Mishaps related to erroneous usage of drug (drug related deaths /complications) directly affect the insurance agencies. As, presence of clinical pharmacists in hospital settings have been associated with reduction of such events, there is a strong pressure on hospitals to supervise the handling of medications by clinical pharmacists, which would be a job opportunity for the Pharm. D professionals.

To sum up this analysis, we would like to recall the famous words of Mrs. Indira Gandhi, the visionary ex-prime minister of India, "Life is not mere living but living in health"¹⁹. Though there would be unavoidable obstacles in the path, it appears that the introduction of the Pharm. D course is likely to bring that dream a little closer.

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