



INTERNATIONAL JOURNAL OF ADVANCES IN PHARMACY MEDICINE AND BIOALLIED SCIENCES

An International, Multi-Disciplinary, Peer-Reviewed, Open Access, Indexed, Triannually Published Journal
| www.biomedjournal.com |




Is the Pharm.D. or Doctor of Pharmacy & Pharm.D. (Post Bacculaureate) course compatible in India?

Javed Akhtar Ansari^{1*}, Imaduddin Quazi².

¹Department of Pharmacology, MESCO College of Pharmacy. Hyderabad, India.

²Department of Medicinal Chemistry, MESCO College of Pharmacy. Hyderabad, India.

MINI REVIEW ARTICLE	ABSTRACT
<p>ARTICLE INFORMATION</p> <hr/> <p><i>Article history</i> Received: 10 August 2015 Revised: 29 August 2015 Accepted: 30 August 2015 Early view: 31 August 2015</p> <hr/> <p>*Author for correspondence E-mail: javed.ansari47@gmail.com</p> <hr/>  <p style="text-align: center;">R C O D E</p>	<p>The first Pharm.D. program was established in 1950 at the University of Southern California School of Pharmacy, Los Angeles, California. In India, Pharm.D. program was introduced in the year 2008 with the aim of increasing the scope of pharmacy to meet the present health care needs. It has got a lot of job opportunities in Government sector, academics, as-clinical pharmacist, community pharmacist, consultant pharmacist. Other areas of interest include CRO (Contract Research Organizations), PV (Pharmacovigilance), medical writing/medical science liaison/medical advisor, IT sector- medical billing, medical coding and insurance claim, corporate hospitals. However, there have some critics been made for Pharm.D. program of India.</p> <p>Keywords: Clinical Pharmacy, NABPLEX, Pharm.D., Pharm.D. (Post Bacculaureate).</p>
Biomedjournal © Copyright 2013, All rights reserved. Biomedjournal Privacy Policy.	

INTRODUCTION

The Pharm.D./PharmD, or Doctor of Pharmacy, is the Under graduate and post graduate, have been replacing the straight pharmacy graduation course (B.Pharm/BS) that must be used to practice as a licensed pharmacist in most of the nations like USA, Canada, France, Italy, Spain, KSA, UAE, India, Pakistan, Bangladesh etc. The first Pharm.D. Program was recognized in 1950 at the University of Southern California School of Pharmacy, Los Angeles, California (Duraisingh et al., 2014).

In India, Pharm.D. program was started in the year 2008 with the objective of growing the opportunity of pharmacy to balance the current health care needs. At hand, the pharmacy council of India (PCI) has granted approval to 201 pharmacy schools (Andhra Pradesh-55; Telangana-51; Karnataka-41; Kerala-17; Tamil Nadu-21; Gujarat-04; Maharashtra-04; Punjab-03; Madhya Pradesh-01; Rajasthan-01; Haryana-01; Uttar Pradesh-01; Uttarakhand-01) imparting Pharm.D. in India. The majority of them are private colleges (PCI).

In India, Pharm.D. course is a specialized pharmacy doctoral program of 6 years period after 10+2 (science academic stream) which includes 5 years of academic study plus 1 year of internship or residency. While, Pharm.D. (Post Bacculaureate) course is a professional pharmacy Doctoral plan. In which, B.Pharm graduates shall be admitted as lateral admission candidate to the 4th year of Pharm.D. program & the time period of course is 3 academic years (2 years of study and 1 year of internship or residency). PCI has clearly informed that Pharm.D. degree holders can prefix Dr to thier name for the reason of practicing pharmacy profession under pharmacy act (PCIa).

The University Grants Commission (UGC) has clarified the Doctor of Pharmacy (Pharm.D.) degree under the Pharm.D. Regulations, 2008 under section 22(3) of the University Grants Commission Act, 1956 at serial number 107, the course is abbreviated as 'Pharm.D.' and extended as 'Doctor of Pharmacy' master level degree of 6 years durations (PCIb).

Both B.Pharm and Pharm.D. can be register as registered pharmacist. Qualification for practicing pharmacy profession under the Pharmacy Act 1948. B.Pharm is a 4 years course and Pharm.D. is 6 years course plus one year of clinical internship. According to PCI, pharmacy practice constituent in all spheres of pharmacy professional services like hospital & clinical pharmacy, community pharmacy, clinical research, regulatory, formulation development, quality control are emphasized in Pharm D program and after Pharm.D. qualification the professionals are qualified to commence Ph.D. programme (PCIa).

SCOPE OF PHARM.D. & PHARM.D. (POST BACCALAUREATE)

A Pharm.D. candidate presumes that after conclusion of Pharm.D., he/she can diagnose, treat and give pharmaceutical care to the patients. That practice is resumed in USA, KSA and other nations. While in India pharmacists are still often known as mere compounders/dispensers. The aspire of the present article is to provide the feasible job opportunity for Indian Pharm.D. graduates.

GOVERNMENT AGENCIES

Local, state, and federal governmental agencies as well as the National Institutes of Health, FDA, Centers for Disease Control and Prevention, Veterans Administration, and Armed Forces all have require of the proficiency of skilled pharmacists. Within these settings, pharmacists can employ in a wide array of tasks, including direct patient care services, biomedical and epidemiological research, reviewing new drug applications, and rising and administering health care policy (O'Shea, 2014).

ACADEMIC

An occupation in academia allows one to inspire individuals about a job in pharmacy and to provide the base to carry out research and continue advances in the field. Some of the reimbursement of academic pharmacy include: improving your own information while having the pleasure of improving the knowledge and learning of students, residents, fellows, and graduate students; having the liberty to be creative and the skill to follow your own research interests; establishing a honour within a specialization and building your career; help to clinical and scientific knowledge. After obtaining the Pharm.D. degree, a Ph.D degree, clinical residency, or fellowship training is typically required to enter a profession in teaching in USA and other nations which not a mandate in India (Anonymous).

CLINICAL PHARMACY

Clinical pharmacists work with physicians, other health care experts, and patients to make in no doubt that the medications prescribed give to best health outcomes. Clinical pharmacist's everyday jobs may include the assessment of the suitability and efficiency of medication use, consulting with health care experts, screening patient therapeutic responses to drugs, checking patient while on rounds in hospital units, and analyzing the

patients. Clinical pharmacists can work inside hospitals, health clinics, nursing homes, and insurance companies (O'Shea, 2014).

COMMUNITY PHARMACY

Community pharmacists give pharmaceutical care straightly to patients by carefully and proficiently dispensing prescription medications, analyzing them on the proper use of a medication, suggesting them of side effects or potential drug interactions, and advising them on the use of over-the-counter medications and herbal supplements. Community pharmacists also impart to physicians, nurses, and other healthcare providers (Anonymous).

CONSULTANT PHARMACY

Pharm.D. graduates can engage in providing expert advice on correct medication use for patients within institutions, often long-term care settings. Consultant pharmacists give the following services: drug regimen review, nutrition assessment, pharmacokinetic dosing services, patient counseling, and therapeutic drug monitoring. Long-term care services for consultant pharmacists include nursing facilities, mental institutions, home health agencies, hospice care, correctional institutions, rehabilitation centers, and adult day care centers (O'Shea, 2014).

OTHERS

Other chances are also equally significant one like CRO (Contract Research Organizations), PV (Pharmacovigilance), Medical Writing/Medical Science Liaison/Medical Advisor, It Sector- Medical Billing, Medical Coding and Insurance Claim, Corporate Hospitals.

CRITICS ON INDIAN DOCTOR OF PHARMACY PROGRAM

A report published by Pharmabiz.com says that the PCI had introduced Pharm.D. program as an educational reform to match global standards, but critics are of the opinion that the course will not seem to match the claim. Report says that, in current scenario the Indian Pharm.D. degree is not recognized by the US Boards of Pharmacy. According to that report "Information received from US is that if one Indian Pharm.D. holder go to US, he/she has to take foreign pharmacy graduate equivalency examination (FPGEE). Then he/she has to go through 1000 to 2000 hours of internship, NABPLEX examination, dispensing examination, law examination, test of English as foreign language (TOEFL), and test of spoken English (TSE) depending upon the states. Only after that he will receive the pharmacist license (Kunnathoor, 2013).

CONCLUSION

Present study suggest that Pharm.D. course in are still in dark horse. Pharm.D. course in India thus have any future in India still a big question mark. Regulating authority instead of giving approval to new institute make sure that student who has passed the course should get first absorb.

ONFLICT OF INTEREST

None declared.

REFERENCES

Anonymous. Career Opportunities in Pharmacy [<http://pharmacy.tamhsc.edu/future/careers.html>] (Accessed on August, 2015).

Duraisingh B, Krishnamoorthy G, Vadlapatla KD, Varghese RS. "A Review on Pharm.D. Education in India". *PharmaTutor* 2014;2 (4):144-148.

Kunnathoor, 2013. Academics concerned about future of Pharm.D. and scope of its job opportunities. [<http://www.pharmabiz.com/NewsDetails.aspx?aid=75997&sid=1>] (Accessed on August, 2015).

O'Shea T, 2014. Career paths for a graduating Pharm.D. [<http://www.pharmacytimes.com/contributor/timothy-o-shea/2014/10/career-paths-for-a-graduating-pharmd>] (Accessed on August, 2015).

PCI. Institutes offering Both Pharm.D. and Pharm.D. (Post Baccalaureate) Courses. [<http://www.pci.nic.in/CollegesCourses/Baccalaureate.aspx>] (Accessed on August, 2015).

PCIa. Frequently Asked Questions (FAQ) about Pharm.D. [<http://www.pci.nic.in/PDF-Files/question.PDF>] (Accessed on August, 2015).

PCIb. Specification of Doctor of Pharmacy (Pharm.D.) degree under section 22(3) of the University Grants Commission Act, 1956. [<http://www.pci.nic.in/Circulars/Subject.pdf>] (Accessed on August, 2015).