# **NOT JUST THE ONES WHO DISPENSE MEDICINES**

Dr. Bala Prabhakar, Dean, School of Pharmacy & Technology Management of NMIMS, talks to Careers360 about the scope and significance of pharmacy education in India...



## Q. The profession of pharmacy seems to be plagued by an identity crisis. People think Pharmacists only sell medicines. Could you throw some light on this?

A. Pharmacy profession in India has two distinct aspects. One aspect is working as a pharmacist in a medical shop. The second aspect is working in pharmaceutical industry where the pharmacists work in R&D, QA, QC, production, marketing, sales, medical writing, IPR and documentation, regulatory and many more roles. The curriculum at UG and PG level, except for a few universities, has always been oriented more towards working in the pharmaceutical industry. The qualification required for dispensing medicines used to be a Diploma in Pharmacy. Diploma holders were to register as pharmacists with Pharmacy Council of India (PCI) and then would be eligible to dispense medicines. Even though this scenario has changed in the recent past, still the people understand the word Pharmacist as the one who dispenses medicines.

However, those working in industries and other areas with higher qualification, including PhD in Pharmacy, are also pharmacists. There is no



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identity crisis for those people working in the hospitals, research institutions as scientists, or faculty in national and international universities and government organizations.

### Q. Is the pharmacy curriculum sequenced in a way to develop such competencies?

A. Generally, curriculum designing is the responsibility of the university. However, 2016-17 onwards, PCI has provided the curriculum to be followed by all the approved pharmacy institutes, which is developed in a systematic manner. But considering the dynamic nature of the profession, the council has left room for improving the curriculum. MHRD, has taken steps to provide autonomy to colleges and universities to develop courses and curriculum, which is a positive step.

#### Q. Is our pedagogy competent to deliver the desired outcomes?

A. With the advent of technology revolution and the explosion in Information and Communication Technology, the era of Internet of Things, Artificial Intelligence (AI), Robotics in health-care, the pedagogy also needs to be changed accordingly. Chalk and board method is rapidly being replaced by Internet-based teaching and learning process leaning towards self-learning through MOOCs, etc.

## Q. What is the role of Pharmacists in clinical data management?

A. Clinical data management is an important aspect for approval of new drugs, understanding adverse drug reactions and how populations across the world respond to a particular drug or treatment and much more. The skills require an understanding of human anatomy, drug interaction, clinical trials, interpretation of results, etc. The qualification required is M.Pharm in Pharmacology or Clinical Pharmacy or MBBS and MD Pharmacology. Additional skills in statistics also prove of great value for data analysis.

## Q. How has the introduction of Doctor of Pharmacy course impacted the way students look at pharmacy as a professional career?

A. The introduction of Doctor of Pharmacy has added the much-needed facet to the Indian pharmacy education. Students with Doctor of Pharmacy qualification can work hand in hand with doctors thus supporting them with pharmaceutical & drug information, adverse drug reactions and newer drug delivery technologies.

It has made them more employable and brought them at par with the pharmacists working in international markets.