Visveswarapura Institute of Pharmaceutical Sciences, (VIPS), the four decade old premier Pharmacy College committed to Professional excellence under the management of Rajya Vokkaligara Sangha. The college has been rendering valuable service to Healthcare Sciences globally. It is offering Diploma in Pharmacy (D.Pharm), Bachelor of Pharmacy (B. Pharm), Master of Pharmacy (M.Pharm), Doctor of Pharmacy (Pharm. D), and Doctoral Programs (Ph.D.) Programs. The college is recognized by Government of Karnataka, approved by Pharmacy Council of India (PCI), New Delhi and affiliated to Rajiv Gandhi University of Health Sciences (RGUHS), Karnataka is having state of art facilities to cater the need of Pharmacy curriculum. It has an excellent team of well qualified, experienced teaching staff and supporting staff. Due to the combined and concerted efforts our students, faculty and alumni across the globe, we have earned reputation in imparting Pharmacy education since inception of college. Our Institution provides the student with a stress-free atmosphere for learning and developing his/her intellectual capabilities. Being amongst top Pharmacy colleges affiliated to RGUHS, India, we believe in versatility. Beyond academics and research, the college also emphasizes students on sports, cultural, co-curricular, extra-curricular and social-service activities. Student safety, discipline & punctuality are a priority in our campus.

A variety of pharmacy degree programs are offered in VIPS: Diploma in Pharmacy (DPharm), Bachelor of Pharmacy (BPharm), Master of Pharmacy (MPharm), Doctor of Pharmacy (PharmD), and Doctor of Philosophy in Pharmacy (PhD). The entry point, for DPharm, BPharm, and PharmD programs is 12 years of formal education in the science i.e., PUC or 10+2. The DPharm program requires a minimum of 2 years of dedidicted coursework followed by practical training either a hospital or community setting. The BPharm involves 4 years of study in colleges affiliated with universities or in a university department. Students holding a BPharm degree can earn an MPharm degree in 2 years, of which the second year is devoted to research leading to a dissertation in any Pharmaceutical discipline, for instance Pharmaceutics, Pharmacology, Pharmaceutical chemistry, Pharmacy Practice and Pharmacognosy. Students with an MPharm degree in any discipline can work toward a PhD with an additional minimum 3 years of study and research. The PharmD program constitutes 6 years of full-time study. The PharmD (post-baccalaureate) program is a 3-year program. The PharmD program was introduced in 2008 with the aim of producing pharmacists who had undergone extensive training in practice sites and could provide pharmaceutical care to patients.

Students who have graduated from this institute have pursued post graduate courses from this college and other pharmacy colleges in the country and abroad and are occupying chief posts in the Pharmaceutical Industries and Research organization in India and abroad. Many Alumni of this college are in abroad working for Research organizations as Scientists, in Universities as academicians and researchers and as Pharmacists.

Brief information about the course:

D Pharm Program

The D Pharm curriculum is framed through the education regulations of the Pharmacy Act. The curriculum is the same throughout the country. D.Pharm course is of two years tenure approved by the Pharmacy Council of India. The minimum qualification to this course is pass in Pre-university /10+2 with optional subjects Physics, Chemistry and Biology or Mathematics. They are absorbed in Government and private sector as Pharmacists.

B.Pharm course

B Pharm is a four years degree course affiliated to the Rajiv Gandhi University of Health Sciences, Karnataka, Bangalore. The qualifying examination for entry into B.Pharm course is Pre-university/ 10+2 with Physics, Chemistry and Biology or Mathematics as optional subjects. For computing merit for the admission Physics, Chemistry and Biology or Mathematics are taken.

M Pharm Program.

The criterion for entry to an M Pharm program is academic performance in the B Pharm or an entrance test or both. Currently, there is more demand for the M Pharm. An important criterion, a high GRADUATE PHARMACY APTITUDE TEST score, qualifies a student to receive government scholarship during the period of their M Pharm study. This criterion is optional for admission to the first-year M Pharm program.

PharmD degree program

Admission to a PharmD degree program is on the basis of successful completion of the PUC in science. Passing the higher secondary examination with physics, chemistry, and biology or mathematics entitles a student to enter the PharmD program. B Pharm degree holders can join the Pharm D program in the fourth year

which is known as Pharm D Post baccularate. In 2008, the 6-year Pharm D and 3-year post-baccalaureate Pharm D began to be offered as professional degree programs in India, focused mainly toward clinical and community aspects of the profession and mandatory practical training at practice sites. The Pharm D program is comprised of 6 academic years, with 5 years of study and 1 year of internship and residency at a practice site. Six months of the internship and residency are spent in a general medicine department and 2 months each in 3 other specialty departments. The clerkship, coupled with project work covering drug utilization reviews, pharmacoepidemiology, pharmacovigilance or pharmacoeconomics, was also in place.

About Pharmacists:

The one who have completed their studies in different Pharmacy courses are designated as Pharmacist. Pharmacists are critical professionals in delivery of healthcare in the country as they bring in-depth knowledge of medicine composition, formulation and usage. Pharmacy professionals are expected playing an important role in healthcare delivery by providing advice and guidance to patients regarding safe and effective use of medications. They are considered an important interface for patients for getting valuable advice on dosage, administration frequency, time of administration, and preventing adverse drug reactions and drug-drug interactions. Adverse drug reactions or ADRs are as dangerous as it sounds. Every medicine, vaccine or treatment that an individual takes might come with a few side effects depending on various conditions. Pharmacist has a sharp knowledge of pharmacology and is well-versed with good prescribing practices, s/he can prevent the patient from experiencing serious ADR or reporting back to their physician for dosage modification or change of drug at the first sign of ADR. India is a vast country, ranking second in terms of population and as diversified a land as are the diseases, making the role of an informed pharmacist, especially in rural areas, even more important in the healthcare continuum. Pharmacists are in spreading awareness about drug safety and seriousness towards the right medical aid, they plays a critical role for safe treatment administration in rural and urban areas across the country.

Why Pharmacy education

The Indian Pharmaceutical industry is, as per reports, one of the fastest-growing. Annually the country produces around 20 percent of the total drugs in the entire world. These figures are only set to experience an uptake in the coming years. Being such a massive industry, it does employ several thousands of people too.

Universities and colleges provide Pharmaceutical degrees from bachelor's to doctoral levels. Earning any one of these degrees ensures them to work in many job positions or also go for higher education. For students who are interested in working in Pharmacy but are confused about where to start, read the following about the full scope of Pharmacy.

Some of the top reasons why one should opt for a B.Pharmacy course are as below.

- Pharmacy degree holders have a greater degree of flexibility than others because they can either work as entrepreneurs or in a hospital.
- Pharmacy graduates can work in several different industries such as sales, marketing, research and development, manufacturing, quality check, education, etc.
- Working in the Pharmacy industry is comparatively stable. Most graduates are able to find employment within months of graduating with a degree as well.
- Higher education degrees in Pharmacy such as doctoral enable people to work in research and development. This lets people make significant discoveries and make a mark in the industry.

Scope of Pharmacy

The scope of pharmacy extends beyond employment, specifically, individuals can also opt for higher education as well. Pharmacy is a relatively stable career and there are always open job positions with scope for advancing to the next level. Some of the options Pharmacy students can look into have been elaborated below.

SALES AND MARKETING : -

Pharmacy companies hire many graduates in sales and marketing positions. These individuals are knowledgeable in the medicine being manufactured. As a part of their work, they are required to approach clinics, pharmacies, and hospitals and convince them to stock their medicine. Undoubtedly, this role requires good communication skills and the ability to convince people.

DRUG MANUFACTURING : -

Pharmaceutical companies also require experienced pharmacy students in roles of drug production. The individual would be responsible for any position in the entire manufacturing process. This role not only requires knowledge of drugs and composition but also state and national rules and regulations regarding the same. To be successful in this role, one must pay attention to detail and also have an organized work style.

QUALITY ASSURANCE : -

In the drug production process, before the said medicine is packed and bottled, there is a quality check step. This step in the whole process is crucial to make sure that no harmful product is being sold. If this step is skipped out or a faulty product makes it to the market, the company might end up with a heavy fee. The **scope in the pharmaceutical industry is quality assurance** is undeniable and large.

RESEARCH AND DEVELOPMENT : -

Besides a bachelor's degree in Pharmacy, a **master's in pharmacy** can also enable individuals to work in research and development. In R&D, one is primarily working at finding out new and better drugs or working on existing drugs to make them better and more effective. This step can also involve minimizing the side effects and also getting patents for the new medicines.

HIGHER EDUCATION: -

Besides seeking out employment, there are multiple higher education options as well. Depending on what the education level of the individual is, there are master's degrees and doctoral degrees. More education would mean more jobs would open up and also a higher pay grade. Admissions will differ for each course and also some courses might also require prior work experience.

Job Profiles after a Pharmacy Degree

Pharmacy degree holders can work in various capacities, both as an entrepreneur and also under an employer. Some of the most popular job profiles most graduates choose to work for are below.

COMMUNITY PHARMACIST: -

A Community Pharmacist is the neighborhood Pharmacist. They typically own the clinic or pharmacy they work at. They will work directly with the patients and general public. They will sell medicines as per prescriptions and also sell over-the-counter medicines without prescriptions. Community Pharmacists do not give prescriptions but can give general recommendations. On average, they earn around INR 3.21 to INR 20 LPA.

HOSPITAL PHARMACIST : -

As opposed to a Community Pharmacist is a Pharmacist that works in a hospital setting. They are under the direct employment of the hospital administration. They will work in the pharmacy attached to the hospital and work with patients of the hospital doctors. Sometimes Hospital Pharmacists also make rounds with the

patients and are in direct communication with the medical staff. Besides computer skills, one must also have communication skills with Hospital Pharmacists. The average salary range is around INR 3.43 to INR 7.95 LPA.

QUALITY CONTROL MANAGER : -

As a continuation of the previous job scope in quality control, one can work as a Quality Control Manager. They are hired by drug manufacturers and will work in making sure the drugs are safe to consume. As a part of their work, they will also set safe consumption limits for certain diseases and illnesses. These individuals should have knowledge of the local laws as well. An average Quality Control Manager earns INR 4.27 to INR 20 LPA.

MEDICAL WRITER : -

Medical writer is a technical writing position where individuals with work experience or degrees in a particular field are hired to write. They typically write blogs, books, reports, website content, etc. Alternatively, some Medical Writers also work with doctors and write up terms of using medicine and other medical records. Medical Writers are either freelancers or full-time employees and earn around INR 2.04 to INR 10 LPA.

Other jobs that a Pharmacy graduate can take up are as follows:

- Drug inspector
- Drug controller
- Hospital pharmacist
- Big data analyst
- Computational pharmacist
- Healthcare management scientist
- Life-cycle management scientist

Future of Pharmacy

Pharmacists play an important role in overall healthcare management. In the new-age pharmacy industry, the candidates need to be accomplished in computational, and management skills in addition to the core technical knowledge. With scientists using more and more new technologies to predict the upcoming health issues, the pharma sector is also moving from being traditional to a highly technology-driven one.

In addition to the core sector in Pharmacy such as Production, Quality Control, Research and Development, Marketing, many new domains have also reopened after the pandemic. New opportunities are available in fields such as Medical coding, Clinical data management, and Clinical trials. Besides the conventional Pharmacy companies, many IT companies such as Cognizant, Genpact, and HCL are also venturing into the Pharma sector.

To experience the true joy of learning, we welcome the young dynamic students to join Visveswarapura Institute of Pharmaceutical Sciences to be a part in building a strong knowledgeable nation.