

PHARMACEUTICS-I- BP103T

UNIT: 1 (Historical background and development of profession of pharmacy, Dosage forms, Prescription, Posology)

CLASS:1

TOPIC: History of profession of Pharmacy in India in relation to pharmacy education

History of Pharmacy in relation to Pharmacy profession In India

Pharmacy is an art and science of manufacturing (compounding) and dispensing of drugs prepared from natural and synthetic sources and used them for the treatment and prevention of any diseases. History of pharmacy profession in India is divided into 3 parts.

1. Ancient pharmacy profession 2. Pre - independence pharmacy profession 3. Post - independence pharmacy profession

1. Ancient Pharmacy Profession

The Ayurveda is wrote in 5000 BC. Ayurveda works on internal medicine whereas Sushruta-Samhita deals mainly with surgical medicine. Charaka and Sushruta where physicians as well as pharmacists who studied more than thousand herbs. The reference to use of various herbs in treating diseases is mentioned in Rig-Veda. The subject of Ayurveda and yoga is considered to be very important in Indian pharmaceutical studies. The main principle behind life was five elements that is pancha-maha-bhuta namely Earth, Water, Fire, Air and Sky. These arises three doshas namely Vata, Pitta and Kapha. Ayurveda become very important until the 19th century when modern allopathy medicine started to come into the country. The first general hospital was set up at Madras in 1664.

2. Pre Independence Pharmacy Profession

The first chemist shop was opened at Calcutta in 1811. In 19th century, various activities related to pharmacy practice were performed according to London pharmacopoeia. Research activities was started in Bombay in 1832 and the animal experiments in Madras in 1879. In India, first pharmaceutical company 'Bengal chemical and pharmaceutical works' started in 1901 at Calcutta (Kolkata) by Acharya Prafulla Chandra Ray. In 1903, small pharmaceutical unit at Parel, Mumbai

was started by professor T. K. Thakkar. In 1941 the first Drugs Technical Advisory Board (DTAB) was constituted under the D and C Act 1940.

3. Post Independence Pharmacy Profession

After independence, India took over the system for the pharmacy profession from the British rules that was unorganized and there were no legal restrictions on the practice of pharmacy. In 1948, the 'Pharmacy Act' was framed that describes minimum standard of educational qualification for pharmacy practice. The provisions of the act are implemented through the Pharmacy Council of India (PCI). As per pharmacy act, it is essential to establish state pharmacy council by individual states that are responsible for controlling and registering a pharmacist in their respective states. English was the only language of instructions for all pharmacy institutions. Today pharmaceutical industry in India is one of the largest and most advanced among the developing countries where pharmacist have various tasks. In last three decades PCI, IPA and leaders in pharmacy profession have collectively undertaken initiatives to improve activities of pharmacy profession. The recent development in pharmacy profession is e - pharmacy, the online sale of medicines.

The Portuguese started the first pharmacy college in Asia at Goa in 1842. The first two-year professional course 'Chemist and Druggist Diploma' was started in Madras Medical College in 1874. An industry oriented 3 year Bachelor of Pharmacy (B. Pharm) program was started by Prof. Mahadev Lal Shroff recognised as 'The Father of Pharmacy Education in India' at Banaras Hindu University, Varanasi in 1932. The first M. Pharm program was introduced in 1940 at BHU. In 1945, doctor of philosophy (Ph.D) program was introduced at BHU. In 1947 Government of India brought the 'Pharmacy Bill' to regulate control and standardize pharmacy education in India. □ Pharmacy Act 1948 provided the minimum standard of educational qualification for pharmacy practice to regulate the practice, education and profession of pharmacy. Pharmacy degree programs offered in India includes Diploma in Pharmacy (D. Pharm), Bachelor of Pharmacy (B. Pharm), Master of Pharmacy (M. Pharm), Master of Science (M.S. Pharm) and Master of Technology (M. Tech. Pharm), Doctor of Pharmacy (Pharm. D), and Doctor of Philosophy (Ph.D). History of Pharmacy in relation to Pharmacy Education In India

The D. Pharm program requires two years of coursework followed by 500 hours of practical training spread over three months either in hospital or community pharmacy affiliated to board. The B. Pharm. program consists of four year of study in college affiliated to University. The PCI

regulation 2014 made the B. Pharm. and M. Pharm. curriculum uniform throughout the nation. Bachelor of Pharmacy program include 6 month project. Students after completion of bachelor of pharmacy may take admission to Master of Pharmacy course. This course is of 2 years in which second year is consists of research work. Master of Pharmacy course is available in different subjects pharmaceutics, pharmaceutical chemistry, pharmacology and toxicology, quality assurance, pharmacognosy, analysis etc. Presently in India there are 7 National Institute of Pharmaceutical Education and Research (NIPER) offering M.S. and M. Tech. in Pharmacy. Students after completing post graduation in pharmacy may take admission to Ph.D degree which is of minimum 3 years of research. In 2008 the Pharm. D. course of six years was introduced. B. Pharmacy degree holders can join the Pharm. D. program in the fourth year. Most of the institutions in the India are run by the private management and self financed. Presently near about 2,000 pharmacy colleges are present in India.

Eligibility criteria for admission – Admission to diploma in pharmacy course is made on the basis of group percentage of physics, chemistry, biology or mathematics in HSC exam. Admission to the Bachelor of Pharmacy course was made on the score of CET examination. Admission to the post graduate pharmacy course is based on the GPAT (Graduate Pharmacy Aptitude Test) score. Curriculum – The diploma pharmacy and Bachelor of Pharmacy course curriculum was as per the amendment of Pharmacy Act. The present education regulation for diploma in pharmacy is ER 2020 and for Bachelor of Pharmacy and Master of Pharmacy is ER 2014. For Pharm. D. the education regulation 2008 is present. Regulations – The pharmacy education in India is regulated by the PCI under the Pharmacy Act 1948 and by the All India council for Technical Education (AICTE) under AICTE Act 1987. The state Pharmacy council of respective state responsible for registration of pharmacist. Pharmacy council has no control over the Master of Pharmacy course.