

HISTORY OF PHARMACY EDUCATION IN NEPAL

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ABSTRACT

Background

Tribhuvan University, institute of Medicine started a two and half years' proficiency certificate level (PCL) course in the year of 1972. This was the initiation of pharmacy education in Nepal where student could enroll after completing the school level education. Four federal Government Universities, two state Government Universities and two health science academics are conducting Bachelor of Pharmacy (B. Pharm) program in 27 pharmacy colleges with the enrollment of 815 students in academic year 2023/24. More than 55 institutions are conducting the 3 years Diploma of Pharmacy course under the affiliation of Council of Technical and Vocational Education (CTEVT) enrolling 2200 students yearly.

Objective

The objective of this paper is to document the history of pharmacy education in Nepal.

Method

We searched using the following terms: Pharmacy education in Nepal or Pharmacy education. Journal Article English (language) in NepJOL (Nepal Journal Online), PubMed. We also searched Google Scholar, HINARI. Reports were obtained from the references of the articles used for analysis. Inclusion criteria for published studies were those subjects who were assessed for the pharmacy education. Articles were reviewed if they were original research and the review articles. The review was limited to English language articles published in scientific literature from any part of the world. We used articles published up to May 2023. Exclusion criteria were studies that reported the pharmacy education only, the articles identified were reviewed. Data obtained were described in text and table.

Results

The first pharmacy course was PCL pharmacy in TU, Institute of medicine started 51 years ago. The first B Pharm course was started in 1994 in Kathmandu University. Now, there are 27 colleges conducting B Pharm course and 55 colleges are conducting Diploma Pharmacy.

Conclusion

The history of pharmacy education in Nepal is just 50 years old. Yet its achievements are remarkable.

Key words: *Pharmacy, education, Diploma, Bachelor of Pharmacy*

INTRODUCTION

The pharmacy education was started in Nepal with the commencement of the Proficiency Certificate Level, a two and half year program (Intermediate in Pharmacy that is similar to Diploma of Pharmacy) at the Institute of Medicine, Tribhuvan University, Maharajung in 1972^{1,2}. The main aim of those graduate was to study the MBBS because they were permitted to appear in the MBBS entrance. For the regulatory approaches to controlling drug selling in the informal sector “Drug Retailer’s Training was started to fulfil the lack of pharmacist in the year 1981³. That was a 45-hr course for drug retailers which emphasized practical training as well as formal teaching on pharmacology, ethics, storage of drugs, and legal issues. By the end of 1989, 4096 drug retailers had graduated from the course. Bachelor of pharmacy course was started only in the last decade of 20th century in Kathmandu University, CTEVT colleges admitted 2200 students every year from 2004 onward. Even today, the lack of pharmacists in District Public Health Offices, District Hospitals and some Zonal hospitals seriously hampers pharmacy service. Even in private sector, the number of retailer outlets was 16,640⁴ in the year 2014 that increased double to 27903⁵ in 2023. As of 2010, there were 3761 pharmacists and 7162 pharmacy assistants registered with the Nepal Pharmacy Council that now in 2023 increased to 6000 pharmacists and 10000 pharmacy assistants⁶⁻⁷.

Bachelor of Pharmacy program, started in 1994 in Kathmandu University. The same institution started Master of Pharmacy and Doctor of Philosophy (Pharmaceutical Sciences) programs in 2000 and 2004, respectively, and also offers a Post-Baccalaureate Pharm D (Doctor of Pharmacy) program⁸. Four federal government universities, two state government universities and two health science academies are conducting bachelor of pharmacy (B Pharm) program in 27 pharmacy colleges with the enrollment of 815 students in academic year 2023/24⁹. In October 2021, FIP brought together members across the six WHO regions to co-create roadmaps to support the advancement of pharmacy and pharmaceutical sciences education¹⁰.

RESULTS**Timeline of Pharmacy Education in Nepal^{1,2,6,7, 9}**

Year	University	Course	Duration
1972	TU, Institute of Medicine	PCL pharmacy	2½ years after SLC
1994	Kathmandu University	Bachelor of Pharmacy	8 semesters
2000	TU, Institute of Medicine	Bachelor of Pharmacy	4 years
2001	Pokhara University	Bachelor of Pharmaceutical Sciences	8 semesters
2004	Council for technical education and Vocational Training (CTEVT)	Diploma in Pharmacy	3 years after SEE
2004	Kathmandu University	M Pharm Pharmaceutical care and industrial Pharmacy	4 semesters
2005	Pokhara University	M Pharm Pharmaceutics and NPC	4 semester
2007	Purbanchal Universities, affiliated colleges only	Bachelor of Pharmacy	8 semesters
2010	Kathmandu University	Post Bacclearate Pharm D program	4 semesters
2011	Pokhara University	M Pharm clinical Pharmacy	4 semester
2016	Purbanchal University	M Pharm Clinical Pharmacy	4 semesters
2019	Purbanchal Universities, constitute campus, Gothgaon, Morang	Bachelor of Pharmacy	8 semesters
2021	Kathmandu University	M Pharm in Pharmacognosy and Phytochemistry and Pharmaceutical analysis	4 semesters
2022	Karnali Academy of Health Sciences	Bachelor of Pharmacy	8 semesters
2022	Madan Bhandary Academy of Health Sciences	Bachelor of Pharmacy	8 semesters
2022	Gandaki University	Bachelor of Pharmacy	8 semesters

2023	Manmohan Technical University	Bachelor of Pharmacy	8 semesters
Note: SLC= School Leaving Certificate. SEE= Secondary Education Examination			

Pharmacists' roles are evolving from that of compounders and dispensers of medicines to that of experts on medicines within multidisciplinary health care teams. In the developing country context, the pharmacy is often the most accessible or even the sole point of access to health care advice and services. Because of their knowledge of medicines and clinical therapeutics, pharmacists are suitably placed for task shifting in health care and could be further trained to undertake functions such as clinical management and laboratory diagnosis¹¹. The majority of pharmacists are employed in community pharmacy (55 %), followed by hospital (18 %), industry, research and academia, and regulation¹². In contrast to this in Nepal majority of pharmacists are employed in industries¹³. Pharmacist is absent in the health care team of Nepal so, the understanding of patients towards pharmacy profession is poor. They often give less priority to appropriate use of medicines and medical devices¹⁴.

CONCLUSION

The history of pharmacy education started in 1972 with the commencement of PCL pharmacy in TU, Institute of Medicine. Till now more than 55 diploma colleges and 27 degree colleges are running in the different parts of the Nepal.

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