

Pharmacy Assistant

CURRICULUM / SYLLABUS/

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Why This Course?

The healthcare industry is constantly growing, as seen in the rising demand for niche medical professionals. As the population ages, the need for medication management and prescription fulfillment will increase. Therefore, pharmacy assistants will be in high demand to help pharmacists with their daily tasks and ensure patients receive the care they need. This job security can provide peace of mind and stability for those pursuing a career in the healthcare industry. Another benefit of a career as a pharmacy assistant is the opportunity for advancement. Many pharmacy assistants start their careers with limited experience and education, but they can advance into higher-paying positions with time and dedication. Pharmacy assistants can earn certification or additional education to become pharmacy technicians or licensed pharmacists. With further education, pharmacy assistants can perform more specialized tasks, such as compounding medications or counseling patients on their medications.

Additionally, pharmacy assistants can pursue leadership roles, such as becoming a supervisor or managers of a pharmacy. These positions offer higher salaries and the opportunity to manage a team graduating from one of many suburban schools, ensuring that the pharmacy runs smoothly and efficiently. A pharmacy assistant career can be fulfilling for those who enjoy helping others. Pharmacy assistant's help patients receive the medications they need to manage their health conditions and improve their quality of life. They also play a crucial role in assuring medication safety by verifying prescriptions, checking drug interactions, and storing medications properly.

Pharmacy assistants work directly with patients, answering questions about medications and providing guidance on medication administration. They also work closely with pharmacists to ensure that medications are properly prepared and dispensed. This close collaboration with healthcare professionals can provide a sense of fulfillment and purpose for those in the healthcare industry.

In addition to helping patients, pharmacy assistants can collaborate with various groups of people, including pharmacists, other healthcare professionals, and patients from all walks of life. This provides a sense of fulfillment and community within the workplace.

What is Indian pharmaceutical industry today?

As of 2023, the Indian pharmaceutical industry is the world's 13th largest by value and third largest in the world by volume. The industry produces over 60,000 generic drugs in different 60 therapeutic categories.

Learning Outcome

1. Demonstrate the ability to accurately interpret the information on a new prescription, request any missing information, and enter it.
2. Demonstrate familiarity with brand and generic drug names, appearance, manufacturer, dosage forms(s), and route of administration for at least the top 100 drugs.
3. Demonstrate the ability to process a medication order completely, accurately, and efficiently (interpretation, drug product selection, computer warnings, packaging, and labeling, filling a prescription in an outpatient setting).
4. Demonstrate accuracy and timeliness in mathematical computation of ingredient amounts, doses, infusion rates, or any relevant calculation encountered in an Outpatient and Inpatient setting.

5. Demonstrate familiarity with third party insurance and perform necessary functions for reimbursement.
6. Demonstrate knowledge in durable medical equipment to adequately communicate with patients about them.
7. Demonstrate knowledge of pharmacy law and apply to the prescription filling process.
8. Display acceptable communication skills during interactions with patients, coworkers and other health care professionals.
9. Display a professional attitude about the practice of pharmacy and the ability to problem-solve.
10. Demonstrate fundamental knowledge of medical terminology and basic rules of vocabulary building.

Role Description

General Purpose

Assist licensed pharmacists in the preparation and dispensing of medications and other pharmaceuticals to inpatients, healthcare providers, outpatients and customers.

Job Duties and Responsibilities

Duties performed under the direct supervision of a licensed pharmacist:

- Assist in the preparation and dispensing of medications
- Assist in the preparation of extemporaneous pharmaceuticals
- Accurately count and pour medications from stock containers
- Repackage and label products and extemporaneous doses
- Receive and input prescription orders into system
- Liaise with healthcare providers to ensure accuracy of prescription information
- Release refill medications and over-the-counter products in accordance with existing procedures
- Request new prescriptions from physicians where necessary
- Provide patients and customers with necessary information about their prescriptions, medications and products

Patient data management:

- Collect, organize and maintain patient information and profiles
- Input details into prescription/patient/pharmacy data management system
- Maintain confidentiality of patient data

Inventory management:

- Monitor and maintain inventory of medicines and pharmaceutical supplies
- Place orders for required inventory
- Receive and record medications and pharmaceutical products
- Process charges

- Package and label medications and pharmaceutical products
- Stock shelves

Payments:

- Prepare billing details for medications
- Collect and process payments
- Complete sales transactions for prescription and over-the-counter medications and other pharmaceutical products
- Process insurance claims

General Duties:

- Maintain work area in an organized and hygienic manner
- Keep pharmacy equipment clean and in good working order
- Ensure products and shelves are kept neat and tidy
- Adhere to quality assurance standards at all times

Pedagogy

1. Live classes with presentations, demonstrations, case studies - in classroom mode.
2. Hands-on exercises, Projects and assignments.
3. Study materials will be available in a LMS.

SYLLABUS

CURRICULUM/SYLLABUS- SUMMARY

The curriculum (also to be used as Syllabus) has got 25 modules of which 17 modules are based on NOS aligned to the Qualification Pack (QP) HSS/ Q 5101 Level 4. There is one bridge module and one supplementary module to enable the trainers to meet the course objective.

Module No.	Module Name	Applicable NOS Code	Module Duration (Hours)	Theory (Hours)	Practical (Hours)
1	Bridge Module (Introduction to pharmacy industry and market orientation)		6	5	1
2	Types of pharmacy practice areas		3	2	1
3	Job history and development of pharmacology and drugs		4	4	0

					4	Pharmacy laws and ethics		3	3	0
					5	Roles and responsibilities of pharmacy assistant		4	3	1
					6	Introduction to terminology and equipments related to pharmacy		6	5	1
					7	Basics of pharmacology		10	8	2
					8	Structure and function of human body		10	8	2
					9	Adverse Drug Reactions (ADR) and Medication Errors		10	8	2
					10	Prescription Reading	HSS/N5401	10	8	2
					11	Dispensing of Prescription	HSS/N5402	10	8	2
					12	Records and Documentation	HSS/N5403, HSS/N5404	10	8	2
					13	Managing and maintaining drug supply	HSS/N5404	10	8	2
					14	Inventory Management	HSS/ N 5111	10	8	2
					15	Medicine and Equipment storage	HSS/N5405	10	8	2
					16	Understand common disease terms		40	35	5
					17	Handling of Hazardous Substances	HSS/N5405	8	6	2
					18	Drug and Cosmetic Rules and Regulations		10	8	2
					19	Act within the limits of competence and authority	HSS/N 9603	4	3	1
					20	Bridge Module (Sanitation, safety and first aid and Emergency Medical Response)		7	5	2
					21	Personnel hygiene		3	2	1
					22	Soft skill and digital literacy		8	1	7
					TOTAL			196	154	42

CURRICULUM AND COURSE COVERAGE

1. Bridge Module (Introduction to pharmacy industry and market orientation, course induction)

A. Understand the structure of Healthcare Services (primary, secondary & tertiary)

- B. Orientation to pharma industry**
- C. Depict an overview of Healthcare Industry**
- D.Importance of Pharmaceutical Industry**

2. Types of pharmacy practice

- A. Identify and recognize the various types of pharmacy practice areas.**
- B. Understand the functioning of major branches of practice areas i.e.:**

- a. Hospital Pharmacy**
- b. Community Pharmacy**

3. Job history and development of pharmacology and drugs

- A. Discuss the history and development of pharmacology and Pharmacy**
- B. Describe the major dosage forms of drugs available:**
 - 1. Solid drugs: tablets, pills, plaster, capsule, granules, caplet, gelcap, powder, lozenges.**
 - 2. Semi- solid drugs: suppository, ointment, creams, gels.**
 - 3. Liquid drugs: syrups, solution, elixir, tincture, fluid extract, liniment, emulsion, mixtures and suspensions, aromatic water.**
 - Gaseous drugs; various anesthetic drugs and Compressed Gases**

4. Pharmacy laws and ethics

- A. Understand and apply the ethical standards related to pharmacies & pharmaceuticals in the country.**
- B. Understand Government Regulations on Pharmaceutical Retail Outlets**
- C.Follow Pharmacy laws & regulations**
- D.Follow the guidelines of Drugs and Cosmetic Act and Pharmacy Act**
- E.Discuss on License requirements of a retail pharmacy**

5.Roles and Responsibilities of Pharmacy Assistant

- A. Recognize the roles and responsibilities of a pharmacy assistant**
- B.Recognize the various stakeholders involved in the pharmacy industry**
- C.Apply the concept of personal grooming and understand the DOs and DON'Ts in grooming.**
- D. Apply the concept of cleanliness, body language and aesthetics.**
- E. Explain the basic steps to become a Pharmacy Assistant.**

6. Introduction to terminology and equipments related to pharmacy

- A. Identify the equipment used in pharmacy like refrigerators, sink and computers with printers, etc.**
- B. Explain the terminology used in pharmacy industry**

7.Basics of pharmacology

- A. Learn the basic fundamentals of pharmacology**
- B. Explain the basic concept of Pharmacodynamics and pharmacokinetics**
- C. Comprehend the side- effects and adverse effects of the drugs.**
- D. Illustrate the basic principles of pharmacology.**

8.Structure and function of human body

- A. Basic understanding of anatomic definitions, cells. and tissues of human body**
- B. Basic understanding of all the body systems and its functions.**

- C. Basic understanding of different fluid compartments in human body.
- D. Basic understanding of various membrane transport mechanisms in human body.
- E. To know about anatomical positions
- F. Gain a basic understanding of the structure and functions of different organ and systems of the body and how they correlate with drug action

9. Adverse Drug Reactions (ADR) and Medication Errors

- A. Explain the basic concept of Adverse Drug Reaction and Adverse drug event
- B. Discuss various types of ADRs based on their severity level.
- C. Severity and Management of Adverse Drug Reaction
- D. Discuss the role of Pharmacy Assistant in monitoring adverse drug reaction
- E. Explain the concept of Medication Error.
- F. Discuss the categories of medication Error
- G. Characteristics of Medication Error, Adverse drug Reaction, Adverse drug Event
- H. Differentiate between ADR, Adverse Drug event and Medication errors

10. Prescription Reading

- A. Overview of Medical Prescription
- B. Recognize the various contents and parts of medical prescription
- C. Illustrate the various abbreviation that are used in the prescription
- D. Explain the process of deciphering a prescription.
- E. Identify the importance of recognizing fraudulent prescription
- F. Follow steps to identify non-authentic or fraudulent prescriptions
- G. Describe various ways of reducing potential frauds.

11. Dispensing of Prescription

- A. Understand procedure of taking in and handing out prescriptions
 - B. Explain the concept & process of selection of Prescribed Medicines
 - C. Define the criteria to select the drugs.
 - D. Describe the concept of selection of Advised Medical Devices
 - E. Define the criteria to select the devices.
 - F. Dispensing medications using dispensary and stores computer systems to generate stock lists and labels
 - Identify the importance of effective recording, dispensing and describing of prescription
 - Demonstrate Recording, Describing & Dispensing of Prescription
 - Undertake the WHO recommended dispensing process
 - ✓ Receive and validate the prescription
 - ✓ Understand and interpret the prescription
 - ✓ Prepare and label items for issue
 - ✓ Make a final check
 - ✓ Record the action taken
 - ✓ Issue medicine to the patient with clear instructions and advice
 - G. Describe the concept of over the Counter Drugs & Restricted Drugs
 - H. Determine the effective handling of OTC and Restricted drugs effectively
- Demonstrate Selling over the counter medicines

12. Records and Documentation

- A. Explain data storage management concepts.

- B.Explain the EHR and technical features of EHR system.
- C.Articulate with concept of Drug Formulary
- D.Understand the importance of drug formulary
- E.Describe how to read drug formulary
- F.Understand the purpose of maintaining drug formulary
- G.Maintain patient profile including lists of medications.
- H.Describe patient profile template
- I. Explain about Maintaining and filing patient records, preparing letters and other paperwork and responding to Faxes.

13.Managing and maintaining drug supply

- A. State the various components of Drug Supply Management i.e.:
 - ✓ Procurement
 - ✓ Distribution
 - ✓ Utilization
- B.Understand the importance of appropriate management and maintenance of drug supply
- C.Determine ordering items for use within a department
 - Explain the process of ordering of the drugs and equipments.
 - Describe the drug procurement cycle
 - Describe the drug distribution cycle
 - Discuss the process of drug preparation at health facility.
 - Describe the process of receiving the supply and their effective shelving & storage.
- D.Describe how the drug supplies are organized.
 - Discuss in brief the drug selection process.
 - Demonstrate receiving, loading, unloading incoming goods from wholesalers, manufacturers and elsewhere
 - Discuss on delivering pharmaceuticals and other goods to sites within a pharmacy department, and wards/departments/clinical areas

14.Inventory Management

- A.Define the principle of inventory management.
- B.Understand Automation and inventory control.
- C.Discuss various inventory control methods like VED analysis, ABC analysis etc.
- D.Demonstrate Pre-packing, assembling and labeling medicines
- E.Identify the expired or outdated or near expiry drugs & medical devices
- F.Demonstrate the appropriate disposal of expired or outdated or near expiry Drugs & medical devices

15.Medicine and Equipment storage

- A. Demonstrate Drug storage conditions and rack management procedure in pharmacy.
- B.Describe various drug storage containers/equipment and its features, merits and demerits
- C.Comprehend the storage criteria of various forms of drugs and medicines.
- D.Understand the importance of labeling the drugs, medical devices/equipment and storage place appropriately
- E.Describe how to accept shipments of medication and supplies unpack and store inventory and ensure it is handled properly.

- F.Explain how various medical equipments can be maintained
- G.Describe the proper storage of medical devices.
- H.Recognize the roles & responsibilities of pharmacy assistant in medicine & equipment storage
- I. Distinguish the storage and labeling criteria of drugs & medical devices/ equipment in retail outlet and Storehouse.

16.Understand Common Disease Terms

- A. Influenza – Overview, Symptoms, Treatment and Diagnosis procedure
- B. Cold and Cough - Overview, Symptoms, Treatment and Diagnosis procedure
- C.Tuberculosis - Overview, Symptoms, Treatment and Diagnosis procedure
- D.AIDS - Overview, Symptoms, Treatment and Diagnosis procedure
- E. Pregnancy -Overview, Symptoms, Treatment and Diagnosis procedure
- F. Appendicitis - Overview, Symptoms, Treatment and Diagnosis procedure
- G. Respiratory Tract Infection - Overview, Symptoms, Treatment and Diagnosis procedure
- H. Urinary Tract Infection - Overview, Symptoms, Treatment and Diagnosis procedure
- I. Chronic Obstructive Pulmonary Disease - Overview, Symptoms, Treatment and Diagnosis procedure
- J.Type 2 Diabetes Mellitus - Overview, Symptoms, Treatment and Diagnosis procedure
- k.Hypertension - Overview, Symptoms, Treatment and Diagnosis procedure
- J. Cancer - Overview, Symptoms, Treatment and Diagnosis procedure
- H. Describe the concept of Acute, Chronic and STD's
- K. Overview of brand and generic name of medicines according to their disease

17.Handling of Hazardous Substances

- A. Know Basic requirements of the health, safety and other legislations and regulations that apply to the work place.
- B.Describe Work place Hazards and safety precautions.
- C.Identify hazardous medications and substance at a pharmacy
- D.Understand the risks involved while handling hazardous medications and substances
- E.Explain the methods of hazardous drugs control & management.
- F.Explain the proper handling of such drugs with the use of PPE.
- Handle hazardous medicines/ substances according to guidelines

18.Drug And Cosmetic Rules And Regulations

- A. Explain the concept of Drug and Cosmetic Act 1945.
- B.Describe the knowledge of Sch H and Sch H1 drugs
- C. Describe the process of maintain schedule H1 drug register
- D.Explain the basic concept of Drug Scheduling
- E.Discuss the significance of SCH1 drugs
- F. Explain the list of drugs under Sch H1 and Sch H

19. ACT WITHIN THE LIMITS OF COMPETENCE AND AUTHORITY

- A. Assist the pharmacists in administrative works.
- B.Understand the meaning of relations and types of relationship
- C.To understand effective working relationships with the people external to the team, with which the individual works on a regular basis
- D.To understand the effect of boundary violation in technician client relationships
- Follow workplace protocol.

20.BRIDGE MODULE (SANITATION, SAFETY AND FIRST AID AND EMERGENCY MEDICAL RESPONSE)

- A.To develop understanding for precautions to ensure Patient's Safety**
- B.Describe common emergency conditions and what to do in medical emergencies.**
- C.Describe basics of first aid and utilization of first aid in regular pharmacy practice area**
- D.Describe the concept of basic life support and emergency medical response.**
- E.Discuss the steps of carrying out CPR on an adult.**
- F.Explain the management of convulsion**
- G.Explain needle stick injuries and their prevention.**

21.PERSONNEL HYGIENE

- A.To develop understanding of the concept of healthy living**
- B.To develop understanding & procedures of hand hygiene**
- C.To develop a mind-set about environmental hygiene and safe sanitary practices, constructing home toilets, proper disposal of domestic wastes.**
- D.To develop techniques of grooming**
- E.To ensure vaccination against common Infectious Diseases**

22.SOFT SKILL AND BASIC COMPUTER KNOWLEDGE

- A. Comprehend the concept of soft- skills, its components and benefits of soft skills**
- B. Understand the art of effective communication.**
- C.Demonstrate how to respond to telephone and face to face enquiries**
- D. Able to handle effective communication with patients & family.**
- E.Maintain health and hygiene and demonstrate personal grooming.**
- F. Develop interpersonal skills**
- G.Develop effective social interaction**
- H.Manage time effectively**
- I. Prepare for interviews**
- J.Develop leadership skills, problem solving techniques.**
- H. To gain broad understanding about application of computers in laboratory Practice**
- I.To know the patient registration process**