

Community Pharmacy is a specialty within the pharmaceutical sciences focused on promoting health and preventing diseases—particularly drug-induced (iatrogenic) diseases—in the community. It does this by advocating safe, cost-effective, and precise utilization of drugs in patient care. Community pharmacy is a retail setting dealing with compounding, counselling, checking, and dispensing of prescription medicines and OTC (Over-the-Counter) products to patients with care, accuracy, and full legal compliance.

History of Community Pharmacy

- The subject of community pharmacy emerged as a consequence of the third wave of pharmacy.
- Before the 20th century, pharmacy was largely an art of preparation and dispensing of drugs as directed by physicians.
- In the mid-20th century, discoveries of newer drugs and advances in technology transformed pharmacy from an art into a science of discovery, preparation, and dispensing; drug use increased steadily.
- The third wave recognized the pharmacist as an integral member of the healthcare team in patient care.
- In the 1950s, educators such as John Autian and Charles Hepler highlighted that pharmacists were “over-educated and under-utilized.”
- John Autian (USA) proposed that the pharmacist should be considered a “consultant on drugs.”

Types of Community Pharmacies

In India, most community pharmacies (medical stores) are typical shops divided into:

- a back prescription area (prescription merchandise and illness-related items), and
- a front area (OTC drugs, toiletries, cosmetics, greeting cards).

They may be independently owned, part of large retail chains, or franchise operations.

1. Chain Pharmacy

A corporately owned set of similar pharmacies in a region or nation; may be national or regional, including outlets in department or grocery stores, often using heavy automation and pharmacy technicians for high-volume dispensing. *Examples:* consumer drug store chains (e.g., Apollo).

2. Franchise Pharmacy

Members of a small chain of professional community pharmacies that prepare and dispense medications but are independently owned (often called apothecaries). A franchiser grants the right to use the company name and sell its products. *Example:* Planet Health; combines features of independent business and large retail chain.

3. Institutional Pharmacies

Organized under a corporate structure, following specific accreditation rules; associated with organized healthcare systems such as hospital pharmacies.

4. Independent Pharmacies and Mail-Order
Trend toward fewer independents in some countries; mail-order operations use centralized, automated systems to fill and ship prescriptions. These may be related to retail pharmacies or run centrally with extensive use of technicians and automation.
5. Home Healthcare Pharmacy
Dispenses, prepares, and delivers drugs and medical supplies directly to patients' homes.
6. Long-Term Care Facility Pharmacy
Serves geriatric and disabled patients ("residents") who cannot provide routine or medical care for themselves; includes adults with chronic or debilitating illnesses (e.g., stroke, Alzheimer's disease).
7. Skilled Care Facilities (SCF)
Provide round-the-clock nursing care (e.g., IV infusions) or post-hospitalization recovery; community pharmacists can support such facilities.
8. Managed Care Facilities
A type of health insurance/healthcare delivery emphasizing wellness and disease control.

Scope of Community Pharmacy

The scope can be viewed as two sub-roles:

A. Professional and Advisory Role (Patient Counselling)

- Advocate safe and effective drug use in hospital and clinical settings.
- Advise healthcare professionals.
- Provide expertise on drug composition (chemical, biological, physical properties), usage, purity, strength; prevent drug interactions and monitor adverse effects.

B. Community Services (Prevention of Diseases and Health-Related Problems)

- Prevent infectious diseases, drug addiction and abuse, and promote population control via family planning through counselling.
- Operate in medical stores; dispense OTC products.

Promotion of Health – Core Components

- Patient Counselling
 1. Population control: proper nutrition, family planning
 2. Risk factors: smoking, alcohol, drug addiction
 3. Referral: to a doctor/specialist when warranted
- Good Sanitation
 - Control of occupational and environmental hazards

Prevention of Diseases – Core Components

- Immunization (Vaccines)
- Proper use of medicines: optimum use, safe and proper storage
- Prevention of self-medication
- Proper compliance with medicines
- Counselling to prevent adverse drug reactions (ADRs) and interactions
- Proper drug administration
- Cost-effective use of drugs (across all components)

Detailed Scope Areas

1) Scope Related to Patient Drug Control

a) Drug Information (Actions and Properties)

Provide authoritative information on chemistry, pharmacology, toxicology, routes of administration, and stability; ensure pharmaceutical quality and appropriate product selection from the market.

b) Drug Utilization

Develop charging policies, implement stock and inventory control, determine proper regimens, educate on administration; maintain stock control reports for prescriptions, controlled drugs, purchases, inspection, and operational improvement.

c) Drug Distribution

Maintain internal controls for dispensing to inpatients; ensure controlled procedures allow rapid re-checks of drug source and quality.

d) Drug Selection – “Rational Drug Therapy”

Defined as the appropriate, efficacious, safe, and cost-effective drug given for the right indication, in the right dose, at the right interval, for the right duration. Activities include:

- Adoption of essential drug concepts
- Training healthcare professionals in rational drug therapy/use
- Maintaining data based on clinical guidelines
- Consumer education and regulatory strategies

Poor RDU leads to illness, ADRs, and increased treatment costs. (Also termed the Essential Drug concept.)

2) Scope Related to Patient Counselling

Counselling on indications, proper use, and potential adverse effects of non-prescription drugs (NPDs) by community and hospital pharmacists. Consider cost; recommend NPDs when appropriate as alternatives to prescriptions.

Practical Scope of Community Pharmacy (Selected Roles)

1. Processing prescriptions: verify legality, safety, appropriateness; check medication records; ensure accurate quantities; counsel as needed.
2. Clinical pharmacy: collect and integrate drug history and dosage regimen information.
3. Patient care: provide drug history review, administration advice, and precautions.
4. Drug monitoring: analyze prescriptions; monitor for ADRs.
5. Extemporaneous preparations: manufacture according to GMP/GDP guidelines.
6. Alternative medicines: supply (e.g., homeopathic, ayurvedic) when suitable.
7. Minor ailments: supply non-prescription medicines; refer if symptoms persist; advise even without supplying drugs.
8. Healthcare professional role: promote rational drug use; advise physicians and the public.
9. Counsellor role: provide advisory and supply services to residential homes; in some regions, pharmacists visit housebound patients for counselling.
10. Prophylaxis and health promotion: participate in local/national campaigns, especially drug-related topics (e.g., rational use in pregnancy; diarrhoea; HIV/AIDS; family planning).
11. Smoking cessation: e.g., bupropion (ZYBAN)—an antidepressant approved in sustained-release form for smoking cessation.
12. Prevention/management of drug abuse, misuse, and addiction: address stimulant and other substance use (e.g., methamphetamine, anabolic steroids, LSD, cocaine, heroin, marijuana) through counselling, adherence aids (dosette/cassette boxes), screening (BP, cholesterol, diabetes), delivery services, budgeting, and staying current with practice and new drugs.

Community Pharmacist – Definition & Core Aims

A community pharmacist is a healthcare professional focused on patients' drug therapy. Major responsibilities include compounding, counselling, checking, and dispensing of prescriptions and OTC products with care, accuracy, and legality; they link the public and physicians, aiming to promote health and prevent disease through safe, cost-effective, optimal drug use, and play a major role in community health care and education.

Professional & Advisory Role: advocate safe, effective drug use; ensure purity and strength; prevent interactions; monitor adverse effects.

Community Services: prevent infections, addiction and abuse; promote family planning; dispense OTC items.

Public Health Involvement via Community Pharmacy

1. Drug & Nutrition Counselling: integrate nutrition assessment with food/nutrient sources and culturally appropriate meal preparation.

2. Proper use of prescribed & OTC drugs: reinforce reading labels; caution with multi-ingredient products; note that prescriptions may be issued by physicians and certain licensed providers (per local laws).
3. Family Planning: FDA-approved methods (pills, injectables, patches), condoms, diaphragms, IUDs, emergency contraception, follow-up care, and sterilization.
4. Pregnancy & Infant Care: reproductive life planning; folic acid intake; control diabetes/conditions; ensure immunizations; maintain healthy weight.
5. Immunizations: Hepatitis B; DTP; Polio; MMR; Varicella, etc.
6. STDs: HIV/AIDS, Chlamydia, Gonorrhoea, PID, HPV (genital warts), HSV-1/2, Syphilis.
7. Control of Toxic Agents: e.g., hydrogen cyanide, osmium tetroxide, phosgene, sodium azide, tetrodotoxin.
8. Occupational Health & Safety: identify OH&S issues and mitigations (e.g., road maintenance sites, signage), environmental impacts, and relevant Indian HSE laws.
9. Control of Accidental Injuries: road traffic injuries, poisoning, falls, burns, drowning.
 - o Primary prevention: prevent the event (pre-event)
 - o Secondary: minimize harm during the event
 - o Tertiary: post-event treatment/rehabilitation
10. Fluoridation of community water: proven prevention of tooth decay (recognized among the top public health achievements of the 20th century).
11. Smoking cessation: nicotine gum, patches, inhalers, sprays, lozenges; nicotine without tobacco.
12. Reducing misuse of alcohol & drugs: taxes/pricing, raising MLDA, zero-tolerance driving laws, and school programs (e.g., DARE).
13. Improved Nutrition: maternal supplementation in pregnancy/lactation, preschool supplementation; encouraging livestock/dairy for calcium and iron intake to support child growth.
14. Environmental Protection: sustainable, equitable resource use; prevent degradation of land/water/air; conserve biodiversity; rehabilitate degraded areas; build awareness; encourage community participation and eco-friendly resources; promote international cooperation.
15. Weight-control programs: reduce obesity via diet and exercise; note limited robust evidence for pharmacy-led weight-loss programs despite interest.
16. Poisoning & Cancer Signals: exposure routes (oral, dermal, inhalation, occupational); household agents are common sources. Cyanide can occur in cassava, lima beans, and in pits/seeds (apricots, apples, peaches).
 - Prevention: lock medicines out of children's reach; keep in original containers; track pill counts; secure hazardous automotive/gardening products.

Roles and Responsibilities of the Community Pharmacist

1. Nutritional Care: advise on diet for better health (e.g., avoid fatty foods in diabetes/obesity; avoid spicy foods in ulcers; ensure iron/iodine/folic acid in

pregnancy/lactation; promote vitamin-A-rich foods—carrots, leafy greens—to prevent blindness).

2. Women's Welfare (Pregnancy & Infant Care): guidance on pregnancy, family planning, breastfeeding, immunization, infant care, small family norms, population control.
3. Rational Drug Use (RDU): route, timing, dose, storage, duration, side/adverse effects, and prevention (e.g., prolonged paracetamol may cause liver damage; prolonged aspirin may cause gastric ulcer).
4. Prevention of Communicable Diseases: educate on safety precautions; exemplified by AIDS prevention.
 - Modes of transmission: unsafe sex, infected blood transfusion, contaminated needles/syringes, mother-to-foetus (placenta).
 - Prevention: condoms and contraceptives; avoid unsafe sex; transfuse only HIV-tested blood.
5. Prevention & Control of Non-Communicable Diseases: awareness and control of CVDs, asthma, diabetes, etc.
6. Diet Control: exercise; low-fat diets; risk-factor modification; BP control.
7. Family Planning: educate on methods such as oral contraceptives and devices (e.g., Copper-T).
8. Drug-Associated Problems: manage side effects, adverse effects, interactions.
9. Professional & Trade Associations: participate to improve practice (e.g., Indian Pharmaceutical Association).
10. Patient Information Brochures: distribute disease-specific brochures (asthma, diabetes, hypertension, epilepsy, common cold/cough; include do's and don'ts).
11. Basic Monitoring/Test Devices: provide BP apparatus, glucometers, peak-flow meters, spirometers.
12. Access to Drug Information: set up drug information centres, reference books, and internet access in pharmacies.
13. Disease Management: provide clinical services and tools (e.g., peak-flow meters in asthma; support glucose control in diabetes).
14. Pharmaceutical Care: focus on patients at risk of drug-related problems or with frequent regimen changes.
15. Medication-Related Outcomes: assume responsibility for outcomes—assess therapeutic needs, ADRs, individualize therapy, manage chronic diseases.
16. Statutory Records: purchase from authorized sources; maintain purchase/sales records (patient name, address, batch no.); enable recalls and legal compliance.
17. Communication Skills: understand needs, listen, maintain a positive mindset; train and practice to improve community pharmacy across India.
18. Supplementary Activity: maintain a dedicated community pharmacy journal to stay updated on new molecules; encourage wide distribution, potentially sponsored by manufacturers.

Responsibilities – Central vs. Ambulatory

1) Central Pharmacist Responsibilities

A) Dispensing Area

1. Ensure established policies and procedures are followed.
2. Check accuracy of doses prepared:
 - o Intravenous admixtures
 - o Unit dose
3. Provide proper drug control:
 - o Ensure proper storage/dispensing (incl. investigational drugs)
 - o Ensure compliance with state and federal drug laws
4. Ensure proper techniques in compounding IV admixtures and extemporaneous preparations.
5. Maintain records and billing:
 - o Patient medication records
 - o Extemporaneous compounding records
 - o IV admixture records and billing
 - o Investigational drug records
 - o Reports (e.g., monthly workload)
6. Maintain professional competence (e.g., drug stability, incompatibilities).
7. Train new personnel in area policies/procedures.
8. Coordinate staff and resources for optimal workflow.
9. Keep the area neat and orderly.
10. Communicate with staff on new developments; assist in evaluations.
11. Provide drug information to pharmacy, medical, and nursing staff.
12. Coordinate overall pharmaceutical needs of patients/patient care areas with dispensing.

B) Patient Care Area

1. Supervision of drug administration:
 - o Review/interpret each unit-dose and IV medication order for accurate entry into systems.
 - o Periodically review each patient's administration record for correct charting and delivery.
2. Review all mixed doses; reschedule as necessary; sign all "drug not given" notices.
3. Ensure new drug administration forms are transcribed accurately; assess charges correctly.
 - o Confirm administered doses are correctly charted.
 - o Ensure narcotic records are correct; inform physicians of automatic stop orders.
 - o Ensure proper administration techniques.
 - o Liaise among pharmacy, nursing, and medical staff.
 - o Communicate on medication administration problems.
 - o Inspect nursing-unit medication areas for adequate floor stock and supplies.

- Ensure supportive services from dispensing and other pharmacy departments are delivered correctly.
- Coordinate pharmacy services at unit level; maintain neatness and security to prevent pilferage.

C) Direct Patient Care

- Identify drugs brought by patients into the hospital; obtain medication histories; communicate to physicians.
- Assist in drug-product/entity selection.
- Assist physicians in dosage regimens and schedules; assign administration times (pharmacokinetic services).
- Monitor total drug therapy for:
 - effectiveness/ineffectiveness
 - side effects
 - toxicities
 - allergic reactions
 - drug interactions
 - appropriate therapeutic outcomes
- Counsel patients on:
 - self-administered medications in hospital
 - discharge medications
- Participate in cardiopulmonary emergencies:
 - procure/prepare drugs
 - chart all medications given
 - perform CPR if necessary.

D) General Responsibilities

- Provide education to pharmacists, externs, clerks, students, residents; nurses and nursing students; physicians and medical students.
- Provide drug information to physicians, nurses, and other healthcare personnel.

2) Ambulatory Responsibilities

A) Dispensing Area

1. Ensure policies/procedures are followed.
2. Check accuracy in supportive personnel's work.
3. Ensure proper techniques in extemporaneous compounding.
4. Maintain record-keeping and billing:
 - patient medication records
 - investigational drug records

- out-patient billing
- reports
- prescription files

5. Maintain professional competence.
6. Train new personnel in ambulatory pharmacy procedures.
7. Coordinate activities with staff for best use of resources.
8. Keep the ambulatory pharmacy area neat and orderly.

B) Patient Care Area

1. Inspect nursing-unit medication areas for adequate stock and proper storage.
2. Identify drugs brought to clinic by patients.
3. Obtain medication histories; communicate pertinent information to physicians.
4. Assist in drug-product/entity selection.
5. Assist physicians with dosage regimens and schedules.
6. Monitor total drug therapy for: effectiveness, side effects, toxicities, allergic reactions, interactions, and appropriate outcomes.
7. Counsel patients on proper medication use.
8. Prepare medications for intravenous administration.
9. Provide medication and/or supplies for home care.

C) General Responsibilities

1. Provide necessary drug information to pharmacy, medical, and nursing staff.
2. Coordinate overall pharmaceutical needs of ambulatory service areas.
3. Ensure adequate drug controls: proper handling (e.g., investigational drug storage) and compliance with laws.
4. Maintain professional competence.
5. Participate in cardiopulmonary emergencies (procure/prepare drugs; chart meds; perform CPR if needed).
6. Provide in-service education to pharmacists, externs, clerks, students, residents; nurses and nursing students; physicians and medical students.