PharmacoLearn

MPP103T Hospital and Community Pharmacy, M.Pharm Semester 1

Unit 3: Education and Training, and Community Pharmacy Practice and Management

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3.1 Education and training: the hospital pharmacy as a teaching department

A hospital pharmacy teaches continuously, because medicines practice changes continuously: new medicines arrive, guidelines are revised, staff join and rotate, and students of several professions pass through the department. The syllabus treats education and training as a function of the department in its own right, and the standard of the function is that it is planned, not left to chance. A training plan names its audiences, the technical staff of the pharmacy, pharmacists, pharmacy students, medical staff and students, and nursing staff and students; states what each audience needs to learn; assigns teachers and time; and keeps records of what was delivered and attended. Training inside a working department follows the logic of supervised practice: explanation, demonstration, supervised performance, independent performance under audit, in that order, with the length of the supervised stages set by the risk of the task. Sterile preparation, controlled medicine handling and dispensing checks are signed off only when competence has been observed, not merely when a session has been attended. The department also teaches in the other direction, receiving questions from the wards and clinics and treating recurring questions as signals of what to teach next. Two products carry this teaching beyond the classroom: the formal and informal meetings and lectures of Section 3.5, and the drug and therapeutics newsletter, which together turn individual answers into institutional learning.

3.2 Training of technical staff

Pharmacy technical staff, the technicians and assistants who support receiving, storage, preparation, dispensing and distribution, are trained for defined tasks under pharmacist supervision, and their training is the foundation on which the department's daily accuracy rests. Induction training covers the department and its procedures: the layout and stock logic of the stores, goods receipt and inspection support, stock rotation and expiry checking, labelling and packing standards, the distribution rounds and their records, cleaning and maintenance schedules for equipment and areas, waste segregation, and the absolute rules, among them that medicines are never issued, substituted or released on a technical judgement that belongs to a pharmacist. Task specific training follows for each assigned duty, with the aseptic and clean area disciplines of Unit 2 taught and assessed before any sterile support work is undertaken, and controlled medicine tasks taught with their register and custody rules. Continuing training keeps pace with change: new products, new systems, new software and the lessons of errors and audits are briefed to the whole team, and periodic refresher and competency checks confirm that long serving staff and new staff are working to the same current standard.

3.3 Training and continuing education for pharmacists and pharmacy students

For pharmacists, training does not end at registration. Continuing education in the hospital setting has three layers. The first is departmental: induction into the hospital's formulary, policies, distribution systems and documentation, so that a pharmacist new to the institution practises the institution's system from the first week. The second is clinical and technical updating: structured reading, case discussions, journal clubs, departmental seminars and conference participation that keep pace with new medicines, new evidence and revised guidelines, with the pharmacist's own record of learning maintained as professional evidence. The

third is service development: training directed at the services the department is building, such as admixture work, drug information, counselling or a speciality rotation, so that competence grows ahead of responsibility. Pharmacy students, from both degree and diploma programmes where the hospital accepts them, are the second audience of this section. Their training in the department is a planned rotation through its sections, with defined objectives for each posting, named supervisors, exposure to dispensing, stores, distribution, preparation and clinical services at a level appropriate to their stage, and assessment against the objectives.

3.4 Training and education for medical and nursing staff and students

The pharmacy teaches the professions it works with, because most prescribing and administration happens outside the department and its quality is set by what prescribers and nurses know. For medical staff and medical students, pharmacy led education centres on the medicines system of the hospital: the formulary and how to use it, prescribing standards and complete order writing, antimicrobial policy and stewardship teaching, high alert medicine safeguards, adverse reaction recognition and reporting, and the introduction of new medicines and revised guidelines as they are issued. Its formats are practical: short teaching within clinical meetings, prescribing feedback from audits, guideline launches, and the one to one advice that accompanies a drug information answer. For nursing staff and nursing students, the teaching centres on administration: the checks before giving a medicine, storage of medicines on the ward, controlled medicine records, infusion and admixture handling and storage, recognition of administration errors and near misses, and the reporting culture that turns an incident into a lesson rather than a concealment.

3.5 Formal and informal meetings, lectures, and the drug and therapeutics newsletter

The channels of this teaching divide into formal and informal. Formal meetings and lectures are the scheduled, recorded channels: departmental teaching sessions, clinical grand rounds and speciality meetings to which pharmacy contributes, committee meetings of Unit 1 and their education items, induction programmes, and invited lectures on new medicines, safety alerts and guideline changes. They create the auditable record that education happened and let the department plan its teaching calendar. Informal channels carry at least as much of the real learning: the corridor and ward side consultations, the telephone advice that solves one prescription and teaches its lesson, the small group discussion around a difficult case, and the pharmacist's presence on ward rounds, where teaching travels in both directions at once. The drug and therapeutics newsletter is the department's written channel and deserves its own description.

3.6 Community pharmacy practice: definition and setting

Community pharmacy practice is the practice of pharmacy in a retail pharmacy serving the general public, where the pharmacist supplies medicines on prescription and, for medicines permitted to be sold without one, on the pharmacist's own professional judgement, and provides the advice, screening and public health services of Units 4 and 5. The community pharmacy is the most accessible point of the health system: it keeps long hours, needs no appointment, and is visited by healthy people collecting regular medicines as well as by patients who are acutely unwell. That accessibility defines both its opportunity and its responsibility. Its work divides into supply functions, dispensing prescriptions and selling permitted medicines with the checks of Section 3.12; advisory functions, counselling, minor ailment response and referral; and public health functions, health promotion, screening, vaccination support where authorised, and the national programme roles of Unit 5. The setting differs from the hospital in ways examinations expect to be stated: the pharmacist usually works without the patient's full medical record, often as the only health professional present, inside a business that must also earn its living, and with a continuing relationship with regular patients that no other part of the system matches.

3.7 Roles and responsibilities of community pharmacists, and relationships with other health care providers

The roles and responsibilities of the community pharmacist follow from the setting. As supplier, the pharmacist ensures that medicines dispensed are genuine, correctly stored, in date and accurately labelled, and that prescription only medicines are supplied only against valid prescriptions. As clinician at first contact, the pharmacist assesses minor ailments, advises self care and permitted medicines, recognises the presentations that must not be managed at the counter, and refers them, the triage work of Unit 4. As counsellor and educator, the pharmacist explains medicines and devices, supports adherence, and gives the health promotion advice of Unit 5. As safety monitor, the pharmacist watches for interactions, duplications across prescribers, and adverse reactions, and reports them through the systems of Unit 4. As public health worker, the pharmacist delivers screening, cessation support, family planning supplies and advice, and programme services. As manager and professional, the pharmacist keeps the pharmacy legal, stocked, staffed, recorded and solvent, the work of the sections that follow. Relationships with other health care providers are built on referral and communication in both directions.

3.8 Legal requirements to start a community pharmacy

Starting a community pharmacy is a regulated act, and the legal requirements are the first topic of its management. The premises must be licensed under the Drugs and Cosmetics Act and Rules for the sale and distribution of medicines, with the licence displayed and renewed as required, and separate requirements met for the categories of medicines the pharmacy intends to stock, including the stricter schedule categories and, where applicable, narcotic and psychotropic medicines. The pharmacy must be run by or under the continuous supervision of a registered pharmacist, registered with the State Pharmacy Council under the Pharmacy Act, and the pharmacist's registration certificate is displayed as the rules require. The premises themselves must meet the prescribed conditions: adequate area and construction, clean and orderly storage with refrigeration for cold chain products, protection of medicines from heat, light and contamination, and the facilities for dispensing and record keeping.

3.9 Site selection, layout and design, and drug display

Where a community pharmacy stands decides much of what it can do. Site selection weighs: the population the site serves and its age and health profile; proximity to prescribers, clinics, hospitals and other patient flows, balanced against direct competition; visibility and access, including approach by foot and vehicle and hours the surrounding area stays active; the cost of the premises against realistic turnover; and legal suitability, since the site must be capable of meeting the licensing conditions of Section 3.8. A site near prescribers brings prescription volume; a site inside a residential area brings regular chronic patients and counter trade; the choice follows the model of pharmacy the owner intends to run. Layout and design then organise the interior around the flow of work and the separation of professional from purely commercial space. The dispensing area is the professional core: prescription reception, assembly, checking and hand over with counselling space that allows a private conversation, designed so that dispensing is not interrupted by counter traffic. Storage follows the hospital logic at smaller scale: ordered shelving, cold storage, secure custody for controlled medicines, quarantine for expired and returned stock.

3.10 The super drug store model

The super drug store is the large format model of community pharmacy: a pharmacy operating at a much larger scale, typically as part of a chain or as a large independent store, combining a full dispensing pharmacy with wide ranges of health, wellness and personal care products under one roof. Its features, as taught under this syllabus head, are scale applied to each function of the ordinary pharmacy. A larger and

deeper stock, centrally procured for a chain, gives availability and purchasing power the single store cannot match. Extended hours, in some locations round the clock, extend the accessibility that defines community pharmacy. Trained teams rather than a single pharmacist allow specialisation within the store, dispensing, counselling, screening services and retail management divided among staff, though a registered pharmacist's supervision remains the legal constant. Systems replace memory: computerised stock, billing, patient medication records and refill reminders run as standard, the software of Section 3.13 used at full strength. Value added services find room and staff here: health screening corners, vaccination and clinic services where authorised, home delivery and chronic care programmes.

3.11 Accounts and audits in community pharmacy

A community pharmacy is a business holding valuable, dated and regulated stock, and its accounts and audits serve the owner, the tax and legal authorities, and patient safety at once. The accounting system records, at minimum: purchases, by supplier and invoice, forming both the financial record and the legal trace of stock origin; sales, through billing that distinguishes prescription and counter sales and records what the schedules require; expenses, including rent, salaries, utilities and services; and stock, valued periodically so that accounts state what the shelves actually hold. Daily discipline makes the system real: the day's billing is totalled and reconciled with receipts, cash and electronic payments are checked, and discrepancies are investigated the same day rather than accumulated. Stock audit, the physical verification of stock against records at intervals, is the control that detects expiry accumulation, pilferage, billing and receiving errors, and record drift; its findings are written up, valued and acted on, and expired stock found is quarantined for authorised disposal, never quietly returned to sale. External and internal audits extend the same scrutiny to the whole record set: licences and registers, purchase and prescription records, controlled medicine balances and tax filings.

3.12 Good dispensing practices

Good dispensing practice is the standard that the right patient receives the right medicine, in the right form and quantity, with the right label and the right information, every time. Its steps form one unbroken sequence. Receive and validate the prescription: confirm it is genuine, complete, legible and legally valid, identify the patient, and resolve any problem under Section 4.2 before dispensing begins. Interpret and assess: read the prescription in full, and check medicine, form and quantity against the patient, their age and condition as known, allergies, other medicines and duplication, the pharmacist's clinical check that distinguishes dispensing from mere supply. Assemble: select the product from the correct location, checking name, strength, form and expiry at selection, with particular care for look alike and sound alike names, and count or measure using clean, appropriate equipment. Check: a final verification of the assembled medicines against the prescription, by the dispensing pharmacist or a second trained person where the system provides one, before labelling hides the contents from view. Label: with the patient's name, the medicine name and strength, clear directions for use in language the patient understands, the date, and the warnings and storage advice the medicine needs.

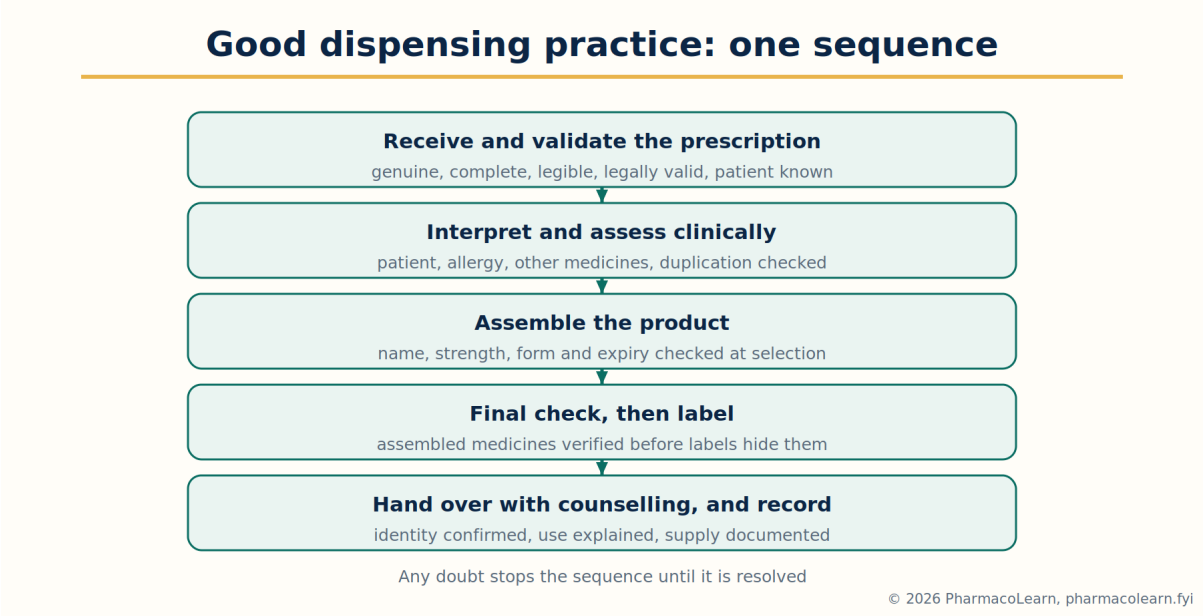

Figure: Good dispensing practice as one sequence. The clinical check stands before assembly, and the final check before labelling.

3.13 Software and databases used in community pharmacies

Computer systems now carry much of the community pharmacy's record keeping, and the syllabus names both the software and the databases. Pharmacy management software handles the operational core: stock and inventory with batch and expiry tracking and reorder alerts; purchase entry and supplier records; billing that applies the schedule and tax rules of each sale; prescription and patient records, including the regular patient's medicine history, which is the data behind refill reminders and interaction awareness; accounts and reports that feed Section 3.11; and controlled medicine registers in electronic form where permitted. Its value is accuracy at speed: expiry alerts prevent the sale of dated stock, stock visibility prevents both stock outs and over ordering, and a regular patient's history is available at the counter in seconds. Drug information databases are the second family: the references the pharmacist consults for interactions, contraindications, use in pregnancy and lactation, adverse reactions and product information, together with price and product directories and the professional and regulatory databases used for reporting and reference.

3.14 Entrepreneurship in community pharmacy

Entrepreneurship in community pharmacy is the creation and development of a pharmacy business as a professional enterprise: the pharmacist as founder, owner and innovator, not only as employee. The entrepreneurial sequence begins with the opportunity: an unserved or underserved locality, a speciality niche such as chronic care support, mother and child health, diabetes supplies and support, or a service gap the existing pharmacies leave open. A business plan converts the opportunity into commitments: the model of pharmacy, the site and premises under Sections 3.8 and 3.9, the stock and equipment investment, staffing, projected turnover and costs, the licences and registrations required, and the break even logic that states when the business sustains itself. Finance follows the plan: own capital, loans and supplier credit, each with its cost and its conditions, arranged so that the young pharmacy is not strangled by its opening stock bill. Launch and growth are professional as much as commercial: prescriber and community relationships built on reliability, services added as competence and demand justify them under Units 4 and 5, records and systems installed from the first day, and reputation guarded as the business's principal asset.

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