| Al-Maarif University | Clinical Pharmacy-I | 4th Stage | College of Pharmacy |

Community Pharmacy

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Lecture No. 1

Learning objectives

Remembering:
Students will recall the differences between prescription-only medications (POM) and over-the-counter (OTC) medications.
Students will list indicators that require referral to a medical professional.

Understanding:
Students will explain the role of community pharmacists.

Applying:
Students will be able to apply the WHAM acronym during patient consultations to gather necessary information.

Analyzing:
Students will analyze different patient cases to identify high-risk indicators that warrant a referral to a physician.
Students will compare and contrast different non-drug treatments and OTC medications for managing minor ailments.

Evaluating:
Students will evaluate the effectiveness and safety of different OTC medications based on evidence-based medicine principles.
Students will assess the appropriateness of OTC product recommendations considering patient-specific factors such as age, pregnancy, and concurrent medications.

Creating:
Students will develop a structured approach for patient consultations in a community pharmacy setting.
Students will design educational materials or handouts for patients to explain the safe use of OTC medications and non-drug treatments.

Keywords

Community pharmacy, OTC, POM

Introductions

Pharmacists practice in different pharmacies, as the following:

1-Community Pharmacy

2-Hospital pharmacy (Institutional)
- Inpatient pharmacy
- Outpatient pharmacy

3-Clinical pharmacists

4-Consulting pharmacist

5-Managed care pharmacy

Pharmacy/Hospital Administrator

Chief Pharmacist

Compounding Pharmacist

Dispensing Pharmacist

Counseling/Clinical Pharmacist

Pharmacy Intern

Pharmacy Technician

Administrative/Management Assistants

Introductions

- **Community Pharmacy** is a healthcare facility that dispenses medications and provides various health-related services to the public within a community setting. Unlike hospital pharmacies, community pharmacies are **easily accessible to the general public** and are typically located in retail settings, such as drugstores, supermarkets, or standalone shops.

- **Clinical Pharmacy** is that area of pharmacy concerned with the science and practice of **rational medication use**.

- **The rational use of drugs** is a conditions in which patients receive medications **appropriate** to their clinical needs, in **doses** that meet their requirements, for an **adequate** period and at the **lowest cost** to them and their community.

Introductions

- **Community pharmacies** are often the **first point of call** for both chronically ill patients and those seeking advice for the first time.

- **A community pharmacist** spends the **vast majority of their time on drug supply** and other **pharmacy management responsibilities**.

- Pharmacists should be involved **more actively in patient care away from the dispensing counter in pharmacies**. An example is home care services offered by the Australian Home Medication Review service, where pharmacists make visits to chronically ill patients and provide pharmaceutical care.

- All the **cognitive services** provided by a community pharmacist are **clinical** when they involve in **direct patient care**.

Introductions

Community Pharmacy Practice

Drug Dispensing
- Traditional Dispensing
- Patient medication adherence
- Home Delivery Service
- Repeat Dispensing
- Minor Ailment Service

Patient Counselling
- Face to Face Consultation
- Electronic Communication
- Patient Empowerment
- Medication Review
- Disease management

Health Promotion
- Smoking Cessation
- Weight Management
- Vaccination Services

Supply of Special Medicine
- Compounded and Controlled Drugs
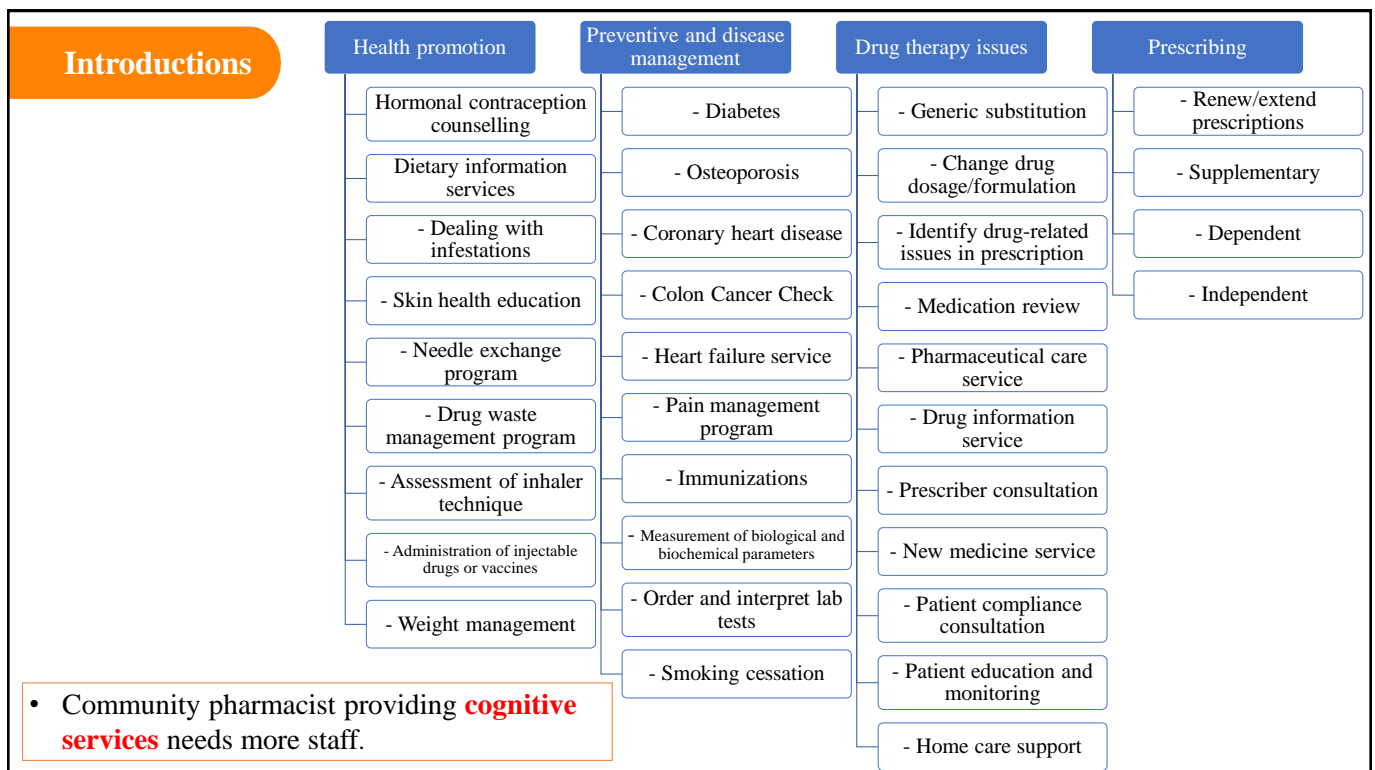- Palliative Care Medication

Clinical Services
- Diagnostic Screening
- Travel Clinic
- Flu Immunisation
- Chronic Disease Management

Training and Education
- Pre-registration Training and Student Placement
- Patient Education and Staff Training

Introductions

Health promotion	Preventive and disease management	Drug therapy issues	Prescribing
Hormonal contraception counselling	- Diabetes	- Generic substitution	- Renew/extend prescriptions
Dietary information services	- Osteoporosis	- Change drug dosage/formulation	- Supplementary
- Dealing with infestations	- Coronary heart disease	- Identify drug-related issues in prescription	- Dependent
- Skin health education	- Colon Cancer Check	- Medication review	- Independent
- Needle exchange program	- Heart failure service	- Pharmaceutical care service	
- Drug waste management program	- Pain management program	- Drug information service	
- Assessment of inhaler technique	- Immunizations	- Prescriber consultation	
- Administration of injectable drugs or vaccines	- Measurement of biological and biochemical parameters	- New medicine service	
- Weight management	- Order and interpret lab tests	- Patient compliance consultation	
	- Smoking cessation	- Patient education and monitoring	
		- Home care support	

- Community pharmacist providing **cognitive services** needs more staff.

Introductions

- In retail community pharmacy, stock control is different from hospital pharmacies and will vary from pharmacy to pharmacy. Factors that influence stock holding and control will be related to the following:

1. **Seasonal factors** (e.g., winter vs. summer, rainy season in the tropics, cyclic illnesses/infections)

2. **Doctors' prescribing** habits in the vicinity (e.g., there could be an oncology practice or pain clinic or a dermatologist nearby that could influence the type and quantity of drugs held in stock).

3. **The size and stock turnover** of the pharmacy

4. **The area that the pharmacy serves** (e.g., population ethnicity, affluent/poor) might also affect the price and sale of products held in stock.

OTC vs POM

Over-The-Counter medications (OTC)

1. Medicines that can be **dispensed without a prescription**.
2. For treating **minor, self-limiting conditions** that patients can manage on their own.
3. **Less Expensive**
4. Generally considered safe for the general population
5. No formal follow-up required
6. Common, minor conditions such as headaches, minor skin irritations, coughs, and colds.

Prescription only medications (POM).

1. Medicines that can only be **obtained with a prescription** from a licensed healthcare provider.
2. For treating conditions that require **professional diagnosis and monitoring**, often with potential for side effects or interactions.
3. **More expensive**
4. Higher risk of side effects, interactions, and misuse
5. Requires ongoing monitoring
6. Chronic or severe conditions like hypertension, diabetes, bacterial infections, severe pain, and mental health disorders.

OTC

- **List of OTC drugs and List of minor alignment**

Pain Relievers
- Acetaminophen
- Ibuprofen
- Aspirin
- Naproxen

Cough, Cold, Allergy
- Dextromethorphan
- Guaifenesin
- Pseudoephedrine
- Cetirizine
- Loratadine
- Diphenhydramine

Gastrointestinal
- Loperamide
- Bismuth Subsalicylate
- Calcium Carbonate
- Omeprazole
- Simethicone

Topical Preparations
- Hydrocortisone
- Neomycin/Polymyxin B/Bacitracin
- Benzoyl Peroxide
- Miconazole

Eye Drops
- Naphazoline/Pheniramine
- Carboxymethylcellulose

Laxatives
- Bisacodyl
- Psyllium
- Polyethylene Glycol 3350
- Aloe Vera Gel

Skin Conditions
- Salicylic Acid
- Clotrimazole
- Permethrin

Smoking Cessation
- Nicotine Patches
- Nicotine Gum

Sleep Aids
- Diphenhydramine
- Melatonin

Vitamins/Supplements
- Multivitamins
- Vitamin C
- Calcium with Vitamin D

Antihistamines
- Fexofenadine
- Chlorpheniramine

Antifungal Treatments
- Terbinafine
- Tolnaftate

Oral Health
- Fluoride Toothpaste
- Antiseptic Mouthwash

Hair Loss Treatment
- Minoxidil

Sun Care
- Sunscreen

List of minor alignment:
1. Acute Sore Throat
2. Conjunctivitis
3. Coughs, Colds, and Nasal Congestion
4. Cradle Cap
5. Dandruff
6. Diarrhoea (Adults)
7. Dry Eyes/Sore Tired Eyes
8. Earwax
9. Excessive Sweating
10. Haemorrhoids
11. Head Lice
12. Indigestion and Heartburn
13. Infant Colic
14. Infrequent Cold Sores of the Lip
15. Infrequent Constipation
16. Infrequent Migraine
17. Insect Bites and Stings
18. Mild Acne
19. Minor Burns and Scalds
20. Mild Cystitis
21. Mild Dry Skin
22. Mild Irritant Dermatitis
23. Mild to Moderate Hay Fever
24. Minor Conditions Associated with Pain, Discomfort, and Fever
25. Mouth Ulcers
26. Nappy Rash
27. Oral Thrush
28. Prevention of Tooth Decay
29. Ringworm/Athlete's Foot
30. Sunburn
31. Sun Protection
32. Teething/Mild Toothache
33. Threadworms
34. Travel Sickness
35. Warts and Verrucae

Lifeliqe

Criteria to dispense OTC medications:

1-The **condition** for which they are used can be reliably **self-diagnosed.**

2-Where there is **no evidence of irreversible or serious adverse reactions.**

3-Where **their use does not require medical supervision or monitoring by a doctor**.

Many medicines have at least 2 different names:

1. **The brand name** – created by the pharmaceutical company that made the medicine

2. **The generic name** – the name of the active ingredient in the medicine

Brand Name: Tylenol
Generic Name: Acetaminophen (Paracetamol)
Brand Name: Advil
Generic Name: Ibuprofen
Brand Name: Lipitor
Generic Name: Atorvastatin

Common Public Requests at the Pharmacy

• Members of the public present to pharmacists and their staff in a number of ways, which include

1. Requesting advice about **symptoms and appropriate treatment**

2. Asking to **purchase a named medicine**

3. **Requiring general health advice** (e.g. about dietary supplements)

4. Asking about **effects/symptoms perceived** to relate to prescribed medicines

How to make a consultation more successful from the patient's perspective: tips from lay people

1. **Introduce yourself** with unknown patients.

2. Keep **eye contact**.

3. Treat patients as human beings and not as a bundle of symptoms.

4. Pay attention to psychosocial issues.

5. Take the patient seriously.

6. Listen – don't interrupt the patient.

7. Show compassion; be empathic.

8. Be honest without being rude.

9. Avoid jargon, check if the patient understands.

10. Offer sources of trusted further information (leaflets, web links).

Responding to a request for help with symptoms

1. **Information gathering "Structuring the consultation"**

2. **Decision making**

✓Is **referral** for a medical opinion required? If No,

✓**OTC** medication required ? If No,

✓**Advice** on the symptoms and no therapy is required.

3. **Treatment**: The selection of possible, appropriate and effective treatments , **offering options to the patient and advising on use of treatment**.

4. **Outcome**: Advising the patient **what action to take if the symptoms do not improve**.

> For example, **advice** on increasing dietary fiber and fluids is an essential part of the management of conditions such as constipation and hemorrhoids.

Structuring the consultation — 1.WHAM

W
- **Who** is the patient and **What** are the symptoms?

H
- **How long** have the symptoms been present?
- In general, longer duration, the more likely of a serious rather than a minor case.
- Most minor conditions are self-limiting and should clear up within a few days.

A
- **Action taken**?
- If the patient has used one or more apparently appropriate treatments without improvement, referral to the family doctor may be the best course of action.

M
- **Medication** being taken?
- A medicine may be causing the symptoms.
- A medicine may indicate a disease state the patients have.
- The patient may already be taking a medicine
- Medications that are recommended may **interact** with existing treatment

Structuring the consultation

2. SIT DOWN SIR

S • Site or location?

I • Intensity or severity?

T • Type or nature?

D • Duration?

O • Onset?

W • With (other symptoms)?

N • Annoyed or aggravated?

S • Spread or radiation?

I • Incidence or frequency pattern?

R • Relieved by?

Positive points
Establishes the severity and nature of problem and if the patient has suffered from previous similar episodes

Negative points
Fails to consider general appearance of patient. No social/lifestyle factors taken into account; no family history sought

Structuring the consultation

3. ASMETHOD

A • Age and appearance

S • Self or someone else

M • Medication

E • Extra medicines

T • Time persisting or duration

H • History

O • Other symptoms

D • Danger/red flag symptoms.

D – Danger/red flag symptoms

These are symptoms requires immediate referral to the doctor.

1. Long duration and recurrent symptoms
2. Weight Loss
3. Persistent or sever Pain or Vomiting or Diarrhea
4. Fever of Unknown Origin
5. Blood in Stool or Vomit or sputum
6. Sudden Vision Changes

7. Shortness of Breath
8. Unexplained Lumps or Swellings
9. Night Sweats
10. Severe Depression or Anxiety
11. Fainting or Seizures
12. Sudden Loss of Consciousness

Structuring the consultation

4. ENCORE

E • Explore — Understand the nature and severity of symptoms, patient identity, and concurrent medications.

N • No medication — Acknowledges that medication may not always be necessary.

C • Care — Pay special attention to vulnerable groups such as the elderly, children, pregnant women, and lactating mothers.

O • Observe — Assess the patient's general appearance and any non-verbal cues.

R • Refer — Identify when symptoms require referral to a doctor.

E • Explain — Clearly communicate with the patient about the recommended course of action.

Special Consideration To Different Age Group

- **Children and the elderly**
- **These two patient groups have the highest usage of medicines per person** compared with anyone else.
- both groups are more liable to develop complications. For example, the risk of dehydration is greater in children with fever or the elderly with diarrhoea.
- Children should be offered sugar-free formulations to minimize dental decay and elderly people often have difficulty in swallowing solid dose formulations.
- It is also likely that the majority of elderly patients will be taking other medications for chronic disease and the possibility of OTC-POM interactions should be considered.

Special Consideration To Different Age Group

- **Pregnancy and lactations**
- The potential for OTC medicines to cause teratogenetic effects is real.
- The safest option is to avoid taking medication during pregnancy, **especially in the first trimester.**
- Many OTC medicines are not licensed for use in pregnancy and breastfeeding because the **manufacturer has no safety data or it is a restriction on their availability**

- **Evidence-based medicine (EBM) and over-the-counter (OTC) drugs**

  - Evidence-based medicine (EBM) emphasizes the use of evidence from well designed and conducted research in healthcare decision-making.

  - **With regard to efficacy, pharmacists should be aware that** many OTC medicines have little or no evidence base**. Therefore, products with proven efficacy should constitute first-line treatment.

  - **Community pharmacists should stop selling over-the-counter (OTC) medicines that have little evidence of efficacy if they want to ensure the best treatment for patients.**

- **Analyse Patient Cases for High-Risk Indicators**

  - **Purpose:** Develop the ability to recognize symptoms and patient characteristics that require a referral to a physician.

  - **Activities:**

    - **Case Study Analysis:**

- **Task:** Review various patient cases with symptoms like chest pain, severe headache, or unusual fatigue.

- **Example Case:** A 55-year-old male with a history of hypertension presents with chest pain and shortness of breath.

- **Action:** Identify these as high-risk indicators that warrant an immediate referral to a physician

• Evaluate the Effectiveness and Safety of OTC Medications

- **Purpose:** Apply evidence-based medicine to determine the best OTC treatment options.
  - **Activities:**
  - **Evidence-Based Review:**
    - **Task:** Review clinical guidelines and research studies on OTC drugs.
    - **Example:** Assess the use of NSAIDs in elderly patients with a history of cardiovascular disease.
    - **Action:** Evaluate the evidence and decide whether to recommend or avoid NSAIDs in such cases.
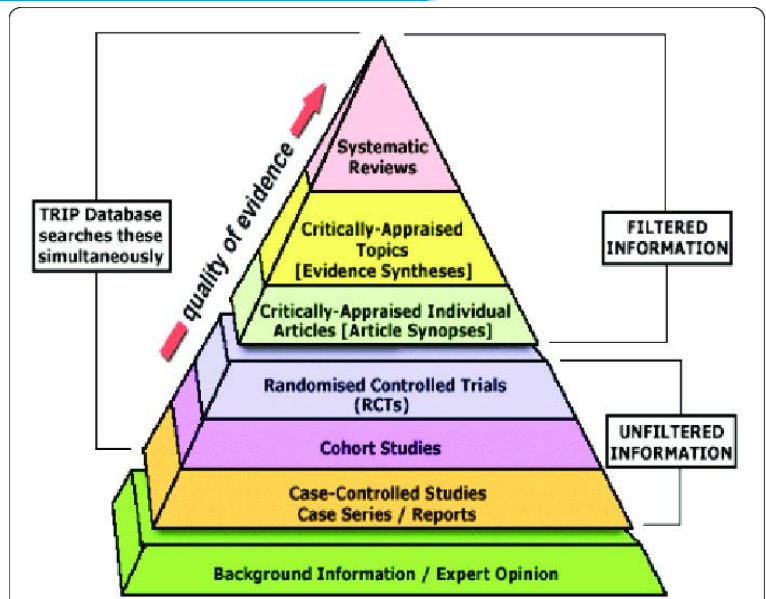
Develop a Structured Approach for Patient Consultations

- **Purpose:** Ensure thorough and consistent consultations in community pharmacy practice.

- **Activities:**

  - **Design a Consultation Model:**

    - **Task:** Create a step-by-step approach for patient interaction.

    - **Example:** Use the WHAM model (Who is the patient? What are the symptoms? How long have they been present? Actions already taken? Medication being taken?).

    - **Action:** Implement this model in role-play scenarios to practice and refine your approach.

Design Educational Materials for Patients

- **Purpose:** Improve patient understanding and safe use of OTC medications.
  - **Activities:**
    - **Create a Patient Handout:**
      - **Task:** Develop a pamphlet or flyer that educates patients on the use of a common OTC product.
      - **Example:** A handout on the proper use of antacids, including dosing, side effects, and when to seek further medical advice.
      - **Action:** Distribute and explain these materials during patient consultations.