

Community Pharmacy



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INTRODUCTION

Professional Communication



Health

- *Health is a familiar word to us but it also carries a lot of problems.*
- *According to the World Health Organization (WHO), health is a state of complete physical, mental and social well-being and absence of any illness.*
- ***A health care team** is the group of people who share a common health goal and common objectives determined by community needs.*
- *On the presence of many false, duplicate and adulterated drugs, it is in the hands of the pharmacist particularly the community pharmacist, to provide better health care and better outcomes economically.*



PHARMACY
FARMACIA

NOTICE
TO CONSUMERS

CONSUMER
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Perceptions of Pharmacists

How do others see us?

- *A bunch of shop-keepers.*
- *Just tell me how and when to use the Medicine and nothing else.*
- *Not really health care practitioners – we're businessmen.*
- *Do you need a degree to be a pharmacist?*

Community pharmacy

- *Community pharmacy is the place where most pharmacists practice the profession of pharmacy.*
- *(commonly named the **chemist** in Australia, New Zealand and UK; or **drugstore** in USA; **retail pharmacy** in industry terminology; or **Apothecary**, historically)*
- *It is the community pharmacy where two profession exists “health professionals and also retailers”.*
- *Community pharmacies usually consist of a **retail storefront** with a **dispensary** where medications are stored and dispensed.*

Community pharmacy cont...

- *All pharmacies are required to have a pharmacist on-duty at all times when open.*
- *In many countries like in Egypt, it is a requirement that the owner of a pharmacy must be **a registered pharmacist**.*
- *However in some countries this latter requirement has been canceled, where many retailers (including supermarkets and mass merchandisers) now include a pharmacy as a department of their store.*
- *Many pharmacies are now grocery store-like in their design. In addition to medicines and prescriptions, now sell a various household items such as cosmetics, shampoo and confectionary.*

Community pharmacist

- *A community pharmacist is the professional who would be in direct access to the public and whose duties are widely desired by the public and patients.*
- *He dispenses medicines with a prescription and in certain cases without a prescription where applicable (OTC drugs).*

Roles of community pharmacist

- 1. Nutrition Counseling***
- 2. Women Welfare-Pregnancy and Infant Care***
- 3. Rational Use of Drugs***
- 4. Communicating With Other Healthcare Providers***
- 5. Family planning***
- 6. Alcohols, Drug Abuse and Smoking Cessation***
- 7. Individualization of Drug Therapy***

1. Nutrition Counseling

- *Community pharmacist can make, significant contributions in assuring adequate nutrition by advising his patients about:*
 - *basic food needs,*
 - *keeping to correct improper food habits in children,*
 - *suggesting special diet instructions for diabetic patients and people with food allergy*

2. Women Welfare-Pregnancy and Infant Care

- A woman goes through different stages throughout her life, each of which has specific need*
- The pharmacist who understands the normal course of pregnancy and infancy is at a distinct advantage as he can guide the mother in simple matters of hygiene and management.*
- The pharmacist **encourage breastfeeding** and can play a major role by guiding the mother for the protection of the child by following proper immunization schedule.*

3. Rational Use of Drugs

- *A community pharmacist can also advise on the administration of the medication.*
- *A community pharmacist provide information on the storage of the medication .*
- *Drug information system should be set up to adverse drug reaction system should be made by the community pharmacist*
- *A community pharmacist should do therapeutic drug monitoring for the patient.*

4. Communicating With Other Healthcare Providers

- Clarify prescriptions with prescribers.*
- Discuss potential for drug interactions with different prescribers .*

For example:

- Dr. Mahmoud prescribed Aspirin 300mg four times daily for a pregnant woman while this cause cleft lip to the fetus.*
- Primary care physician Dr. Samir recently prescribed Erythromycin with theophylline while the Erythromycin inhibits the clearance of the theophylline increasing its blood concentration.*

5. Family Planning

- *One of the greatest needs of the hour is to control the tremendously increasing population in Egypt.*
- *A community pharmacist is the one who can control this rising population by counseling with people and doing programs which exhibit the problems related with large families.*
- *He can tell the various families planning measures that are available in the market at affordable prices.*

6. Alcohols, Drug Abuse and Smoking Cessation

- The diseases of alcoholism and drug abuse also come under the preview of the community pharmacist.*
- The pharmacist has a key role to help individuals who become dependent upon alcohol and tobacco. The pharmacist can advise on the products available to assist the patient in giving up smoking.*
- Drug abuse is similar to alcoholism yet different because it has been gaining more acceptances among young people.*

7. *Individualization of Drug Therapy*

- *Today the latest concept in medicine is towards individualization of drug therapy.*
- *Where well judged patient care is needed individualization of drug therapy becomes a need, and a pharmacist can play a vital role in this.*
- *A pharmacist can provide consultation to the patient by **checking the patient history, allergies and other details necessary for therapy** so that the concept of individualization of drug therapy could be implemented.*

Polypharmacy

- ***Polypharmacy*** is generally refers to the use of multiple medications by a patient.
- The term is used when too many forms of medication are used by a patient, when more drugs are prescribed than is clinically warranted, or even when all prescribed medications are clinically indicated but there are too many drugs to take.
- The most common results of polypharmacy are increased adverse drug reactions and higher costs.
- Polypharmacy is most common in the elderly.

Drug information

- *Drug information awareness programmes should be conducted to make people aware of side effects of certain OTC drugs e.g.*
 - *Aspirin - a drug has many side effects like gastric ulceration; asthma and large doses may cause tinnitus.*
 - *Regular use of paracetamol can cause harm to the liver.*
 - *How many amongst the common people know that drugs such as cough syrup can increase blood pressure in patients having hypertension.*
 - *Even pain shows difference between men and women. where women respond better to the opioids such as morphine and pethidine, men respond better to the non-steroidal anti-inflammatory drug as ibuprofen.*

Medication Counseling

- *Provide medication benefits and directions for use*
 - *What time of day to take certain medications*
- *Assess how the medication is working*
 - *Have the symptoms been improving*
- *Inform about any side effects*
 - *Discuss expectations and management*
- *Inquire about other concomitant medications*
 - *Screen for drug interactions*

The ideal frontline community pharmacist

- *The ideal frontline pharmacist of the future has been described as a **seven star pharmacist**-some one who is equal in excellence to a five star hotel yet accessible to everyone from the richest to the poor. **The future 7 star pharmacists will have seven principal roles to play:**
 - *Care giver;*
 - *Decision-maker;*
 - *Communicator;*
 - *Leader;*
 - *Manager;*
 - *Life long learner and*
 - *Role model.**
- ***The community pharmacist with the above skills and attitudes should make himself an essential partner in health care system of a nation.***

Factors affecting choice of drug

- ***Pharmacokinetic considerations*** (absorption, distribution, metabolism and excretion).
- ***Pharmacodynamic considerations*** (potency of drugs).
- ***Therapeutic considerations:***
 - Features of disease.*
 - Co-existing diseases.*
 - Avoidance of adverse effects.*
 - Avoidance of drug interactions.*
- ***Patient compliance.***
- ***Which route of administration?***
(sublingual, rectal, I.M. & S.C.)
- ***Which formulation?***
(soluble or enteric coated tablet)
- ***What dosage regimen?***
- ***For how long should treatment last?***

Types of drugs



Medicines are classified into **FOUR categories:**

I- General sales medicines:

- **Can be supplied in Supermarkets.**
e.g. aspirin and antacids.
- **These preparations may be used inappropriately.**

II- Pharmacy medicines:

(Over – The – Counter {OTC})

(Non-prescription drugs)

- **Supplied to a patient without a prescription.**
- **Supplied only by a registered pharmacist.**
- **May cause adverse effects and interact with other prescribed drugs.**

III-*Prescription-Only Medicines:*

(POM)

(Legend drugs)

Only supplied by a pharmacist on the prescription of a registered medical practitioner.

IV-*Controlled drugs*

(Only prescribed by registered medical practitioners)

Drugs with a high abuse potential

Drugs of addiction

Drugs with non-therapeutic psychotropic activity

Antidepressants, antipsychotic, tranquilizers,.....

Controlled drugs (CD)

Potential for abuse increases

- **Schedule 1** – cannabis, hallucinogens (coca leaf & LSD) [No recognised medicinal use].
- **Schedule 2** – heroin, morphine, amphetamine & cocaine [stored in a locked cabinet, prescribed by a doctor & a register must be kept in the pharmacy).
(prescriptions are not refillable)
- **Schedule 3** – codeine combinations.
- **Schedule 4** – benzodiazepines (diazepam) & anabolic steroids.
- **Schedule 5** – antitussive preparations with codeine.

Legal requirements differ from country to another but ethical and practical responsibilities are universal

Prescription-only medicines (POM)

- *High risk*
- *Low safety*
- *Treated conditions are usually more difficult to self-assess*
- *Safe use requires prescription*
- *Less detailed label*

Non-prescription drugs (OTC)

- *Minimum risk*
- *Higher safety*
- *Treat complaints for which users recognize their own symptoms*
- *Used on the basis of their labelling alone, then drug must be safe and effective*
- *More detailed label*

SELF-MEDICATION **WHEN INDIVIDUALS TREAT THEMSELVES.**

Those individuals may become confused by:

1. The large number of OTC drugs available (increasing number of prescription agents moving to non-prescription status)
2. The advertising agencies (claim differences between formulations).

Role of pharmacist

Professional

Economical

OTC DRUGS



According to FDA regulations:

An OTC drug must be:

- ***Safe*** (low incidence of adverse-drug reactions, side effects, ...etc)
- ***Effective*** (provide clinically significant relief of complain)
- ***Bear a fully informative label***

OTC labels

- In addition to the name, active ingredients, inactive ingredients, manufacturer name, net quantity, indications for use, dosages, warning and cautionary statements, expiration date and batch number,.....*

There are certain requirements for the OTC label



Requirements for the OTC drug label:

- *Should be away from complex-medical terminology*
- *Terms used should accurately reflex the symptom which is relieved by the drug (e.g. Heart burn in antacid labelling)*
- *Warnings against misuse (e.g. Stop taking this product if ringing in the ear occursfor toxic over-dose of salicylates)*

Selection of OTC drugs

- *Select single ingredient products*
 - *Select a product with completely informative label*
 - *For children:*
 - dose
 - dosage form
 - palatability
- are important***

Doctors should be familiar with OTC drugs. Why?

- *They should advise patients (to select safe and effective drug)*
- *OTC drugs may worsen existing medical condition*
- *OTC drugs may interact with prescription medication (e.g. **Aspirin** & **warfarin**)*
- *Misuse of OTC drugs may produce significant medical complications*

Common medical problems due to misuse (or overuse) of OTC drugs:

- *Rebound congestion* (regular use of nasal sprays)
- *Constipation and hypophosphatemia* (chronic antacids e.g. $\text{Al}(\text{OH})_3$)
- *Electrolyte disturbance* (laxative abuse in elderly)
- *Insomnia, restlessness and nervousness* (sympathomimetics and caffeine)
- *Renal damage* (chronic use of analgesics)
- *Sedation and drowsiness* (antihistamines especially with alcohol)
- *Allergic reactions* (antibiotics, preservatives,etc)

Cases in which OTC are primary therapy

- *Acne*
- *Constipation*
- *Dysmenorrhea*
- *Vaginal candidiasis*
- *Head lice*

Most frequently used *OTC drugs*

- *Analgesics*
- *Laxatives*
- *Vitamins*
- *Antacids*
- *Cough and cold preparations*



Less frequently used

