

اللَّهُمَّ افتح لنا أبواب رحمتك، واغفر لنا ذنوبنا، وبارك لنا في صيامنا وقيامنا، واجعل الأيام القادمة أيام جبرٍ وخيرٍ، واكتب لنا فيها في كل يوم قبولاً في السماء، ومحبةً في الأرض، وتوفيقاً يلزم الخطى، وبركةً في الوقت والعمل، وهدى منك لكل ما تحب وترضى، وتسخيراً لكل ما فيه خيرٌ لنا، وبلغنا ليلة القدر ونحن في أحسن حال. ♥♥

OTC medications & The Practitioner's Role in Self Care

Non-Prescription Drugs and Parapharmaceuticals

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Brief History

* التاريخ مش حفظ

- In 1906, the FDA was established
- Before this, most drugs were available without prescription
الأدوية ماكانت مقسية انا بوصفة أو بدون كلها كانت بدون وصفة بما فيها الحمار بجوانا والكوكايين بحرين مار في تعديل
- Cocaine, marijuana, and opium were included in some OTC products without notification to the users



Brief History

- **Durham-Humphrey Amendment of 1951**
- In the US, the term OTC drugs was legalized in 1951 via Durham-Humphrey Amendment.
- The law distinguished between legend (prescription) drugs and over-the-counter (OTC) (non-prescription) drugs.
- OTC drugs were required to be both safe and effective.

بعد من قسم الادوية التي
OTC drugs ←
prescribed drugs ←

Any drug قبل ما تبذل عن اذنه لازم يكون safe and effective



Definitions

- Over-the-counter (OTC) medications are defined as **safe and effective drugs available to use by the general public without a doctor's prescription(FDA).**
- They play an increasingly vital role in our health care system and are the most prevalent means of treating the majority of common health problems in the United States.



* الأرقام من حفظا

The Self-Care Revolution

- >100,000 OTC products are available to consumers in the US to treat > 400 ailments.
- OTC drugs account for ~ 60% of all the medications in the US.
- In 2016, the American public spent approximately \$34 billion on OTC products to self-manage a wide variety of acute and chronic medical conditions

كان الصرف عن هابي الادوية 34 billion dollar
وكانو بيصرفو عن ال OTC drugs لعلاج ال
Acute + Chronic Conditions

Self-care, Self-medication

العوامل التي زادت من استخدام OTC product :-

Factors that drive reliance on self-medication

include:

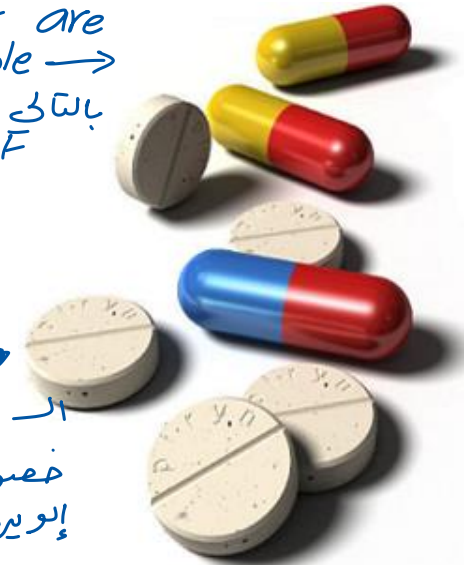
* We have some barriers that limiting to visit the health care provider : cost / الكلفة / زي الوقت

OTC product are widely available →
بالتالي يزيد الاعتماد عن OTC product

- The increase in size of the aging population.
- Restricted access to prescribers through health management organizations.
- The increasing cost of health care.
- The high proportion of underinsured or uninsured population.

الـ Population size زاد خصوصاً مثلاً كبار السن أو الذين لا يأتون إلى الطبيب

في بعض الناس من ما يترددون في زيارة استهلاك OTC product



Rx-to-OTC switch

Prescription

- An Rx-to OTC switch is defined as over-the counter (OTC) marketing of a drug product that was once a prescription (Rx) drug for the **same indication, with the same strength, dose, duration of use, dosage form, and route of administration.**

شترطو بس احوك ال Rx ← OTC :-

① لازم أتأكد من ال safety + efficacy للدوا

② لما يتجون الدوا لازم ما يكون إلو narrow therapeutic index

↳ increase the risk of drug toxicity

③ ما بدني احوالو لازم يكون نفس الدوا ، نفس الاستخدام ، نفس التركيز ،

نفس ال duration ، نفس ال dosage form ، نفس ال Route of administration

Selected agents switched from prescription to over-the-counter status by the US Food and Drug Administration (2006–2017).

Ingredient	Indication (Pharmacologic Category)	Year Ingredient First Switched	Single-Ingredient Product Examples
Adapalene	Acne (topical retinoid)	2016	Differin Gel
Budesonide	Allergic rhinitis (topical glucocorticoid)	2015	Rhinocort Allergy Spray
Cetirizine	Hay fever/upper respiratory allergies (antihistamine)	2007	Zyrtec
Esomeprazole	Acid reducer (proton-pump inhibitor)	2014	Nexium 24 hour
Fexofenadine	Hay fever/upper respiratory allergies (antihistamine)	2011	Allegra 12 hour, Allegra 24 hour
Fluticasone	Allergic rhinitis (topical glucocorticoid)	2014	Flonase Allergy Relief, Flonase Sensimist Allergy-Relief
Ketotifen	Itchy eyes (ophthalmic antihistamine)	2006	Alaway, Zaditor
Lansoprazole	Acid reducer (proton-pump inhibitor)	2009	Prevacid 24 hour
Levocetirizine	Hay fever/upper respiratory allergies (antihistamine)	2017	Xyzal
Levonorgestrel	Emergency contraceptive (progestin)	2006	Plan B One-Step
Orlistat	Weight loss aid (lipase inhibitor)	2007	Alli
Oxybutynin	Overactive bladder (transdermal anticholinergic)	2013	Oxytrol for Women
Polyethylene glycol	Constipation (osmotic laxative)	2006	MiraLAX
Triamcinolone	Allergic rhinitis (topical glucocorticoid)	2013	Nasacort Allergy 24 hour

Rx-to-OTC switch

كمان عملو هاد انا switch شو اكلو حالهم؟

Rx to OTC switch is considered if the following questions can be answered in the affirmative

1. Can the patient adequately **self-diagnosed** the clinical abnormality?
2. Can the clinically abnormal condition be successfully **self-treated**?
3. Is the self-treatment product **safe and effective** for consumer use under conditions of actual use?

ما يكون انا narrow therapeutic index

+
high drug drug interaction
ما يكون انا

ال efficacy انا
تكون عالية

لما عدنا ال Switch زي ما حكينا نفس ال use
نفس ال strength
نفس ال Rout

Rx-to-OTC switch

انا حولت الدواء من Prescrib ← OTC

Reclassification Criteria:

- The indication(s) for which the drug to be used on an OTC basis should be similar to those on Rx and must permit easy diagnosis and monitoring by the patient.
- A favorable adverse-event and drug interaction profiles, relatively low toxicity and a low potential for abuse. *Advers effect or drug drug interaction لازم تكون acceptable في minimal*
- The drug should not have properties that make it impractical for OTC use, e.g. narrow therapeutic index. *if the drug have narrow therapeutic index we cant consider it as a OTC product as: warfarin / phenytoin / digoxin. because of high risk of toxicity , drug drug interaction*

OTC drugs in Jordan

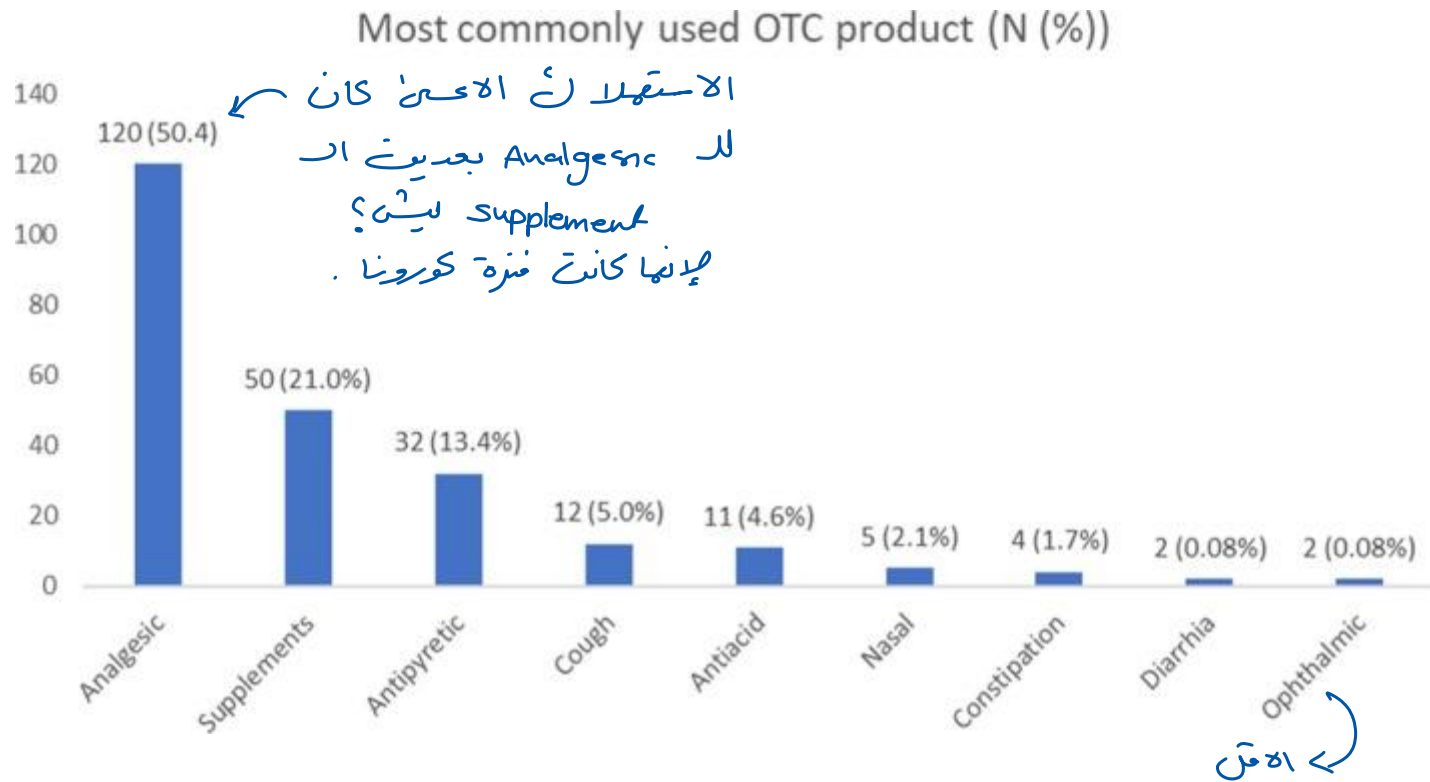
الزيادة بالصرف عن استعمال OTC product
بسبب Syrian refugees زاد الـ population
زاد الاستعمال → they are under insured
على الـ OTC product

- OTC consumption is estimated to have reached USD77.8 million in 2018, increasing by a CAGR of 7.8% from USD 53.5 million in 2013. This significant increase is due to the influx of Syrian refugees, who demand OTC to attend to basic health needs, especially at point of arrival¹.

برضو زار الاستعمال عن الـ Prescribed drugs
حكومي لاني في ناس دخلت التأمين اكثر .

- Jordan's prescribed consumption is estimated at USD181.5 million in 2018, representing 70% of overall consumption. This high percentage is due to 87% of the Jordanian population holding health insurance and a significant proportion of those have multiple insurances¹.

Jordanian population awareness about OTC medications



Analgesics were the most commonly used OTC products among the participants (50.4%) followed by supplements (like vitamins and minerals) and antipyretics. Other categories of OTC products used were cough syrups, anti-acids, nasal drops and sprays to reduce nasal congestion and a runny nose, constipation medications, diarrheal medications, and ophthalmic drops and ointment²

من فترة لفترة و موسم لموسم
بالتون في variations

2.Taybeh, E., Al-Alami, Z., Alsous, M., Rizik, M., & Alkhateeb, Z. (2020). The awareness of the Jordanian population about OTC medications: A cross-sectional study. *Pharmacology research & perspectives*, 8(1), e00553.

Considerations in Reclassifying a Drug as OTC

ممكنيا لازم نتطلع عن ال Safety + efficacy

- Safety → من ناحية انو الدواء لازم يكون عنده the lowest or no risk to miss use or abuse → addiction يعني ما يصير عيية
- Which is a Relative matter.
- benefits outweigh risks.
- the potential for misuse and abuse is low.
- Ease of diagnosis and treatment.
- Adequately labeled

Nonprescription drug labeling

appropriately labeled *بكون* *OTC or prescribed* *كل* *دوا* *

- The law requires all over the-counter drug labels to have information in a standard format designed to give the user easy-to-find information.

الـ *labeling* *بكون* *فصحة*؛

- main ingredient
- uses
- strength
- How to store the drug
- the safe in pregnancy and lactation
- warning
- have allergy or no

Drug Facts

Active ingredients/Purposes

- Make sure the **Active Ingredients** aren't the same as those in another medicine already being used.
- If the medicine contains more than one **Active Ingredient**, read the **Purposes** of each active ingredient to make sure all of the active ingredients are needed for the problem(s) or symptom(s) to be treated.

Uses

- Find medicine that **treats only** the problem(s) or symptom(s) to be treated.

Warnings

- Is there any reason this medicine shouldn't be used?
- Is there any reason to talk to a doctor or pharmacist before using this medicine?

Directions

- Find the correct dose on the package.
- Make sure liquid medicine comes with a measuring tool (such as dosing or measuring cup). If not, ask for one at the pharmacy. Spoons made for eating and cooking may give the wrong dose and shouldn't be used.

They read the label..NOT !

ما لازم اعتمد ان المريض راح يجسك
leaflet و يقرأها اذ يكون عنده
previous experience ممكن ما بيخبره يقرأ أو يقرأ وما يفهم وممكن يكون مهمتهم بجزئية معينة به
(زيادة interaction / S.E) يعني ما راح يقرأ whole label of the whole leaflet عشان صحت

- 90% to 95% of consumers read the Drug Facts label. However, ^{as a pharmacist من الضروري} to ensure the safe and use of OTC product
 - most read the label selectively
 - often pay insufficient attention to the active ingredients and the safety information.
 - Even if patients read the label, they may not comprehend it.
- 50% of respondents who reported taking an OTC pain reliever in 2009 were not concerned about potential side effects.
- Only 16% of consumers read the whole label !

Nonprescription drug labeling

- However, the likelihood of inappropriate nonprescription drug use resulting from misreading of product labels increases when patients have limited reading skills or language barrier.
- Pharmacists can take prominent role in ensuring the safe use of nonprescription drugs.

The benefits of over-the-counter availability

- Direct, rapid access to effective medicines
- Wide availability
- Decreased health care system utilization (fewer physician visits, lower health care system costs)
- Allowing individuals to be in charge of their own health.
- OTC drugs are cheaper → مقارنة مع الـ Prescribed Medication

Examples of drug abuse : cough relievers (Codeine) & Cold medicines

- 5% of teens have abused cough medicines in 2009, they look for Codeine ..
- Pseudoephedrine is commonly found in OTC cold drugs, It is abused by sport players.

عليه abuse من ال athlete لانو
CNS stimulant بزيء ال Performance
and alertness لراي خبيرن خسر و صرا قبل
المباريات / اللعبة عشان هيك صول ال
OTC product ممكن يصير عيوسم
abuse.



Drug interactions



* کثیرا دوریہ بستکارین مع الہیکل زی، ر grapefruit

- The risk for drug interactions increases as consumers use more nonprescription medications.
- In addition, diet and lifestyle can affect medications' ability to work in the body.
- Certain food, beverages (grapefruit juice), alcohol, caffeine and even cigarette smoking can interact with medications.
- To avoid drug interactions, patients should consult pharmacists when first selecting nonprescription medications.



Drug-Food/Beverage Interaction

OTC Drug	Food/Beverage	Potential Adverse Effect
Acetaminophen	Garlic	Delayed acetaminophen absorption
Aspirin	Garlic	Increased risk of bleeding
Calcium	Oxalic acid foods (spinach, rhubarb); phytic acid foods (bran/whole-grain cereal)	Altered calcium absorption
Zinc	Caffeine; dairy products (milk)	Decreased zinc absorption

← absorption of ← بآثر على
 ← bleeding tendency ← يزيد ←
 ← Oxalic acid, iron, zinc ←
 ← Ca absorption
 ← zinc absorption ←
 ← caffeine, dairy product, iron →

Drug-Disease Interactions

OTC Drug	Condition	Mechanism
Aspirin	Hyperuricemia	Decreased renal excretion of uric acid
Doxylamine succinate, phenylephrine HCl	Glaucoma	Obstructed aqueous outflow
Naproxen, ketoprofen	Peptic ulcer disease	Altered gastric mucosal barrier
Pheniramine maleate, naphazoline HCl, nicotine	Hypertension	Increased vascular resistance

↑ Risk of ↑ uric acid ← gout
 ← gouty attack
 ← Hypertension ←
 → Sympathomimatic
 ← Hypertension ←
 increase the total performance resistance by increasing the blood pressure

Drug-Alcohol Interactions

OTC Drug	Potential Adverse Effect	Mechanism
Aspirin	Increased gastrointestinal blood loss	Prolongs bleeding time
Diphenhydramine HCl	Increased sedation	Depresses central nervous system
Insulin	Increased hypoglycemia	Decreases hepatic gluconeogenesis

→ bleeding ←
 ← Sedation ←
 ← Sedation ←

Allergies to active or inactive ingredients

- Although the likelihood is low, any medicine can cause allergic reaction.
- Patients should always be counseled about the signs and symptoms of an allergic reaction (Itching, hives, and trouble breathing) and instructed to seek medical care immediately.
- Therefore, for safety reasons, FDA requires inactive ingredients to be listed in the label.

* برضو من الأسئلة المهمة التي يجب أن نأخذها بعين الاعتبار، خاصةً به فيما نراعي أنواع الحساسية التي لها
the active ingredient, most of individual can develop hypersensitivity reaction due to other excipient
Lactose وغيره من الـ excipient ← المرض يمكن أن يكون حساسية منها عندنا من المهم من الـ FDA to
include these ingredients in the leaflet or in the label and asking the Patient if he has developed any
allergic reaction before :- ؟ ما عندك حساسية بالأمس ؟ بما أفدتها ما عندك حكة جدي ؟ ما عندك صعوبة بالتنفس ؟

Pharmaceutical care for high-risk and special groups

Infants and Children

- It is important to differentiate among relatively distinctive pediatric ages as follow:

الحداج

- ← قبل 36 اسبوع *Premature: gestation of less than 36 weeks*
- ← يوم - شهر *Neonate: first postnatal month of life*
- ← شهر - 12 شهر *Infant (baby): ages 1 to 12 months*
- ← سنة - 3 سنوات *Toddler: ages 1 to 3 years*
- ← 3 سنوات - 6 سنوات *Preschool or early childhood: ages 3 to 6 years*
- ← 6 - 12 سنة . *Middle childhood: ages 6 to 12 years*
- ← 13 - 18 سنة ، عينا
تقريباً 15 سنة بنخسة
adult *Adolescence: ages 13 to 18 years*

Infants and Children

لن صاي الفئات ينصب نلجر لـ Liquid dosage form
لأنه أسهل

TABLE 2-1 Selected Medication Administration Guidelines for Oral Medications

Infants → بنصطهم بـ oral syringe و صري الآسن لأنها calibrated

- Use a calibrated dropper or oral syringe.
- Support the infant's head while holding the infant in the lap.
- Give small amounts of medication to prevent choking.
- If desired, crush non-enteric-coated or non-sustained-release tablets into a powder and sprinkle them on small amounts of food.
- Provide physical comfort while administering medications to help calm the infant.

Toddlers

- Allow the toddler to choose a position in which to take the medication.
- If necessary, disguise the taste of the medication with a small volume of flavored drink or small amounts of food. A rinse with a flavored drink or water will help remove an unpleasant aftertaste.
- Use simple commands in the toddler's jargon to obtain cooperation.

- Allow the toddler to choose which of the medications (if multiple) to take first.
- Provide verbal and tactile responses to promote cooperative taking of medication.
- Allow the toddler to become familiar with the oral dosing device.

Preschool Children

- If possible, place a tablet or capsule near the back of the tongue; then provide water or a flavored liquid to aid the swallowing of the medication.
→ in the back of the tongue
بدنا ننتبه لما نعطين احمدة او الكبسولة في ظهرها
فيمن عنده البلع، ذال الأسمن نقطة Syrup
- If the child's teeth are loose, do not use chewable tablets.
- Use a straw to administer medications that could stain teeth.
- Use a follow-up rinse with a flavored drink to help minimize any unpleasant medication aftertaste.
- Allow the child to help make decisions about dosage formulation, place of administration, medication to take first, and type of flavored drink to use.

Pharmaceutical care for high-risk and special groups-Pregnant women

① الشرح تحت :-

- Most self-medication products state “ if pregnant or breast-feeding, ask a health care professional before use”
- **Pharmacists** are trained to assess whether a nonprescription medication is safe for use during pregnancy (A, B, C, D, X system).
- The decision to suggest a medication must be based on up-to-date knowledge of the literature and a critical risk-benefit evaluation.
- Pharmacists should consult a reference such as the *Drugs in Pregnancy and Lactation* by Briggs and others to check for the safety of medication in this population.
- The pharmacist must be alert to the possibility of pregnancy in any women of childbearing age who has certain symptoms of early pregnancy (nausea, vomiting and frequent urination)

Pharmaceutical care for high-risk and special groups-Nursing

② شرح تحت :-

Mothers

- Breast-feeding mothers are also faced with difficult choices when selecting nonprescription medications.
- **Pharmacists** can provide the following recommendations to help avoid problems in women who are breast-feeding:
 1. Use nonpharmacologic therapy if possible.
 2. Take medications immediately after nursing or before the infant's longest sleep period.
 3. Avoid recommending any medications that are extra-strength, maximum-strength or long-acting.
 4. Avoid recommending combination products.
 5. Counsel about potential side effects that could occur in the child.

2

* أما مع المرضية فـ في خلال long duration of action or drugs has extra strength

ما بد من الادوية التي فيها drug combination Panadol extra
خلصها بعرض الـ Panadol العادي ليس؟ لا يمكن ان يخرج
طفلهما بالرضاعة، ما يعرف كم من هذا الدواء يخرج بصيرته
excretion in the breast milk ويوصل للطفل وهذا يختلف عن:

- 1) drug characteristics
- 2) lipid solubility
- 3) half time
- 4) M.W
- 5) protein binding

* الادوية التي لها long half time انما هي عازية
to be excreted عن وقت صيرته بنسبها كما دونه الدواء مباشرة بعد
الرضاعة وقبل الـ infant long sleep duration.

* اذا وضو طريق عن الدواء وعازية ان يخرج بصيرته
excretion in breast milk في يتحول للرضاعة الصناعية.

* نرايب اي S.E ممكن يصير عن الطفل.

1

* الادوية مقسمة الى A, B, C, D, X
↳ totally contraindicated because it's a teratogenic

* واء ماس او مرضية إليها اعتبارها للتفاعل مع الادوية، من
الاعتبار الخاصة لما يجي المرأة عن الحسنية وتأل عن نوا :-
① Identify the patient : اياك؟ متروجة؟ ماس؟

من متأكدة

لما تكون شاكه من متأكدة اذا حامل ولا والدوا الي اجبت توفنة
not absolutely safe ما بد عليها اية خصوصاً اذا كانت بالامر
السنة الاولى عن صيرت كـ Pharmacist واءا حاس او
مرضع نبالا بالـ non pharmacological approaches as possible :-
رضاعة / اكل / شرب / تخفيف وزن ...
اما اذا كان prescribed ماي حالة ثانية في Benefit risk ratio و
يرجع لطبيبها

Nursing Mothers

Nonprescription medications that are usually considered compatible with breast-feeding include the following^{46,50}:

- Analgesics: acetaminophen, ibuprofen, naproxen, and ketoprofen
- Antacids
- Antidiarrheals: kaolin-pectin, attapulgite, and loperamide
- Antihistamines: brompheniramine, chlorpheniramine, diphenhydramine, and triprolidine
- Antisecretory agents: cimetidine, famotidine, ranitidine, and nizatidine
- Cough preparations: dextromethorphan
- Cromolyn sodium
- Decongestants: phenylephrine and pseudoephedrine
- Fluoride
- Laxatives: bran type, bulk-forming type, docusate, glycerin suppositories, magnesium hydroxide, and senna
- Vitamins

Managing minor ailments in the community pharmacy

کیفیت سے اپنی دوائی اور OTC product



Patient presentation

* المريض ييجي عن الصيدلية سواء لـ استشارة / نصيحة.
← شراء دوا

- 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.

Role and responsibility of pharmacist

1. Differentiation between minor and more serious symptoms
2. Effective communication: Listening skills & Questioning skills
3. Treatment choices based on evidence of effectiveness
4. Role model & educator: the ability to pass these skills on by acting as a role model for other pharmacy staff

as a pharmacist لہذا تبحر سے، دیکھنے لیتے اور کم سے کم فرق بین :-

① it's a minor element can be controlled in the Pharmacy? or the Patient need further intervention (major problem)

② the pharmacist should have good communication skill in asking and listening
بہتر سے اس کی بات اور اچھی گفتگو

③ بعد سے نقرہ میں
minor element I will select the Proper treatment

Working in partnership with patients

you should not consider the patient as a blank sheet ← Conversation
انا كصيد لاني بدي اعمل Conversation
هو مش ورقة خاضية بالعكس في مرضنا بيجوع عين :-

- Any person seeking advice about symptoms is considered as patient.
- Pharmacists are skilled and knowledgeable about medicines and about the likely causes of illness but **patients are not blank sheets:**
 1. May have experienced the **same or a similar condition in the past**
 2. May have **tried different treatments already** → وهو مجرب / ماخذ أنواع كثيرة من الادوية
 3. Will have **their own ideas about possible causes** → هياي عين وعارف السبب صدأ
انا دائما عندي حرقه لانو بدخن كثير
 4. May have **preferences for certain treatment approaches** → انا ما بدي الدواء X
بدي الدواء Y بيكون
 5. Will have **views about different sorts of treatments** مش مرتاح عليه (بينفخ / ايه طعم ...)

Responding to a request of a named product

لما يجي ويرطلب حوا حنين بالإسم ما أعتد انو عند experience وعارف شوالدوا ابي طلبو ف لازم اعطيه advice
the Proper advice

- Consider if the person making the request might be an **expert**?!
 - Expert user is someone who has used the medicine before for the same or a similar condition and is familiar with it.
- While pharmacists and their staff need to ensure that the requested medicine is appropriate, they also need to bear in mind the previous knowledge and experience of the purchaser. So:
 - Briefly explain why questions are needed?
 - Fewer questions are normally needed when customers request a named medicine that they have used before.

Responding to a request for help with symptoms

إجابة مريضاً وعنة Symptoms في ابدأ بـ

①

**Information
gathering**

②

**Decision
making**

③

Treatment

④

Outcome

1- Information gathering

- Information gathering is to develop rapport, listen and question to obtain information
- The process should start with questions and perhaps an explanation of why it is necessary to ask personal questions.

بيجين ويب الأئلة :-

- كم عمرك؟ من ايت بتعاني؟

- عندك أمراض تانية؟

- بتوخذ ادوية تانية؟

- جربت اي أدوية من قبل؟

- جربت أعشاب؟

2- Decision making

I will make my decision ← من أُنظري

to give the treatment or the patient need medical referral ?

- Community pharmacists have developed procedures for information gathering when responding to requests for advice that identify when the presenting problem can be managed within the pharmacy and when referral for medical advice is needed.

- **Referral?** → يحضر أحول، نمرين لا
الجبين، المختص

We will exclude the self treatment
وما بصرف OTC product لا نو، نمرين
لحاجة إلى further investigation

متى بيكون حاجة إلى further investigation ?
بالسلا، بجاي ↓

The possible reasons for referral for further advice include the following:

- Unknown cause for symptoms → رُتَابُهُ عَنِ الْأَسْبَابِ يَكُونُ مَا فِي سَبَبٍ مَعْرُوفٍ
- Incomplete information (e.g. an ear condition where the ear has not been examined) → الْمَعْلُومَاتُ الَّتِي بِيَعْرِضُنِي أَيَّهَا
مَنْ كَامِلَةٌ
- Duration or recurrence of symptoms
- Potential need for a prescription-only medicine → * إِذَا، يَحْتَاجُ الْوَسْطَةَ
Prescrip drug not OTC product

As a general rule, pharmacist should consider referring the patient to the doctor:

- Long duration of symptoms
- Recurring or worsening problems
- Failed medication (one or more appropriate medicines used already, without improvement) *إذا أخذ العلاج ورجع عليك ولقيت إنيو إلعلاج فستل في ← To control the symptoms*
- Suspected adverse drug reactions (to prescription or OTC medicine) *بشرط إنزو المحررين اخذ الدواء in the right way*
- Red flag signs and symptoms

*هتي قاطع ممنوع يتعالج
بـ OTC product*

Examples of Red flag symptoms

∴ Red Flag → علامات خطيرة

- Bleeding
- Signs and symptoms of infection (fever, pus, swelling)
- Loss of appetite or weight without reason
- Severe pain

3- Treatment

- The pharmacist's background in pharmacology, therapeutics and pharmaceuticals gives a sound base on which to make logical treatment choices based on the individual patient's need.
- In addition to the effectiveness of the active ingredients included in the product, the pharmacist will need to consider potential interactions, cautions, contraindications and adverse reaction profile of each constituent.

* The drug is selected according to patient condition : Age / Drug history / Medical history

* Try as much we can to have the safest drug in his condition with the lowest adverse effect
drug - drug interaction and if have contraindication

Pharmacists should be aware of!!



- Drug interactions:
 - OTC drugs may **worsen existing medical conditions or interact** with prescription medications.
- Abuse or misuse of OTC drugs
- Hidden ingredients in OTC drugs

4- Outcome

- Pharmacist should advice the patient what action to take if the symptoms do not improve

لها أعصية الدم بالحيلة لازم ترجعلي بعد اسبوعين
او إنلج رح تحس بتحسن بعد كذا فترة
وإذا ما حس بالتحسن لازم تراجع الطبيب

- **TIMESCALE!!**

PATIENT CONSULTATION



Structuring the consultation

- It is very useful to adopt a framework to help structure the consultation.
- Pharmacists need to develop a method of information seeking that works for them. *We need to build a rapport with good conversation and listening communication between the patient and the pharmacist.*
- 1st build rapport!! *we look for :*

W – Who is the patient and what are the symptoms? → *السوا إلك وها كدا تاني؟*

H – How long have the symptoms been present? → *متك في ال Constipation يوم غير
عن يومين غير عن ثلاثة صبه عمر صبرين*

A – Action taken? → *شو تصرف؟
راح عن دكتور من قبل؟*

M – Medication being taken? → *جره أدوية من قبل؟*

②

بعد ما تأكدت من الـ Patient و رويته Rapport
بينه وبينه. I will select the drug

Patient

① • Confirm identity ← اول شي لازم
Who is the patient?

Drug

- Name
- Strength
- Indication

Directions

- Route
 - Frequency
 - Duration
 - Missed doses
 - Storage → في أدوية بتحتاج لتدجان
- بحضرة اياه في الـ right way

Precautions

- Adverse effects
- Food & drug interactions
- Contraindications
- Steps to take if any of the above are encountered

Monitoring

- How to monitor response to therapy → بكملة بس تلاحظين عندك الامراض منق بتروج الحرارة/الاجمرار
- Expected therapeutic outcomes
- When to seek medical attention → منك : انا اعطيتك الدواء اسرعين اذا ما حسنت او الامراض صارت اسوء لتتزوج تروج على الدكتور
- Refill information
- Any other information specific to drug/patient

Pharmacist's role in nonprescription drug therapy

- In the initial encounter with a patient who is seeking assistance with nonprescription drug, the pharmacist should:
 1. **Assess**, by interview and observation, the patient's physical complaint/ symptoms.
 2. **Differentiate** self-treatable conditions from those requiring a physician's intervention.
 3. **Advise** and counsel on **the proper course of action** (no drug treatment, self-treatment with nonprescription medications, or referral to a physician).
 4. **Advise** the patient on the **outcome** of the selected course of action.
 5. **Assure** the patient that the desired **therapeutic outcome can be achieved if nonprescription medications are taken as directed** on the label.