

# Handling of Prescriptions

Handling of prescriptions with professional standards, reviewing prescriptions, checking for legal compliance and completeness (minimum 5)

It is a written order for medication by physician or RMP to a pharmacist (compounding and dispensing) for the individual patient.

## PARTS OF PRESCRIPTION

### I. Heading

- Date
- Personal data of patient

### II. Body

- Superscription—Rx symbol abbreviation of latin word 'Recipe' which means 'take thou' or 'you take'.
- Inscription—consists of the name and quantities of the prescribed ingredients.
- Subscription—prescriber's directions to the pharmacist regarding preparation of medication.
- Signature (Sig)—directions to be given to the patient regarding medication.

### III. Closing

- Signature of physician
- Signature of patient

## Legal Compliance

- A prescription is legal when it is written/typed by a RMP
- Signed by the RMP
- Cover all contained with respect to parts of prescription.
- Require alertness and critical judgement by the pharmacist
- Handwritten prescription is often difficult to read, in any doubt it should be clarified by the prescriber.
- In case of illegibility of name, age, etc., ask the patient for the correct spelling tactfully.
- Similarity in spelling of names of different drugs create reading error, i.e. Metriz (Metronidazole).
- Metrix (Glucosamide), AZT (Azithromycin), AGT (Tinidazole), Metlong (Metformin), Metlog (Metoprolol), T-zine (cetirizine HCl), Tizan (Tizanidine), Aceclo (Aceclofen), Seclo (Omeprazole).
- "Never dispense on guess basis". So make sure what you are dispensing.

## COMPLETENESS

- It is communication from the RMP to the dispenser regarding patient care
- Check carefully
  - i. Physician's details
  - ii. Patient's details

- iii. Product details—in regard to name of product, dosage form, potency of medicine, total amount to be dispensed, direction for use and frequency of administration.

### Refill

In certain case a single course of therapy is not sufficient for effective treatment of the patient. So on the same prescription, the physician may decide to repeat the course of therapy so many times as required is called refill.

### MODERN METHOD OF WRITING PRESCRIPTION AND DISPENSING

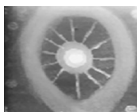
- At present majority of drugs are available in the market as ready-made formulations.
- So the role of pharmacist is to dispense the ready-made formulations to the patient.
- The prescription should be accurate, clear, easily readable and the latin terms should be avoided.
- The drugs should be prescribed by its generic names or trade names.

### CONCLUSION

Phrmacist should ensure that “right” patient is receiving the “right” drug in a “right” dose.

### Example of Prescription

Date



Patient's Name: Shiv  
Address: 52/52 Pocket  
CR Park, New Delhi

Om Shanti Clinic  
CR Park, Delhi-110019

Age: 10 years  
Weight: 30 kg  
Sex: M

#### Rx

Paracetamol 150 mg  
Make powder.  
Sig.To be taken as directed

Refill: 6 times

Signature of Physician  
Reg. No.  
Date:

## Experiment 1: Dispensing of Capsules

### Object

Dispensing of capsules

Capsule
<b>For</b> <b>Age</b> <b>Sex</b> <b>Address</b>
<b>Rx</b>  Ferrous gluconate: 200 mg Make capsules, send such six <b>Signa:</b> One capsule to be taken after meal <b>Type:</b> Haematinic capsule
<b>Date of dispensing:</b> <b>Dispensed by:</b> <b>Name and address of pharmacy:</b>

### Procedure

Calculate the amount of ferrous gluconate and weigh. Fill the powder into capsule shell. Press the base of the capsule until the capsule is filled with the desired amount of ferrous gluconate. Replace the cap over the base. Check the weight by comparing the empty capsule. Fill the required number of capsule. Now clean all the capsules after filling by the proper use of liquid paraffin and dry cloth or towel. Label and dispense.

### Use

In treatment of iron deficiency anaemias.



## Experiment 2: Dispensing of the Mixture

### Object

Dispensing of the mixture containing diffusible solid (e.g. 1).

Mixture
<b>For</b> <b>Age</b> <b>Sex</b> <b>Address</b>  <b>Rx</b> Magnesium sulphate: 30 g Light magnesium carbonate: 4 g Peppermint water: q.s. 180 ml Make mixture, send 60 ml <b>Signa:</b> One table spoonful to be taken at bed time <b>Type:</b> Mixture containing diffusible solid  <b>Date of dispensing:</b> <b>Dispensed by:</b> <b>Name and address of pharmacy:</b>

### Theory

Light magnesium carbonate is a diffusible substance, whereas magnesium sulphate is a soluble substance. So method for mixtures containing diffusible solids is to be followed.

### Procedure

Take calculated amount of magnesium sulphate and light magnesium carbonate in a mortar and mix properly. Measure 3/4th of the vehicle. Triturate with small amount of vehicle to form a smooth cream. Then add remaining volume of vehicle with constant trituration. Filter it if any foreign particles are visible by using a piece of muslin cloth. Adjust the final volume by adding more of the vehicle. Transfer the mixture in a clean bottle, label it with the direction "**Shake the bottle before use**".

### Use

As saline purgative (large doses) and antacid (small doses).



## Experiment 3: Dispensing of the Mixture

### Object

Dispensing of the mixture containing diffusible solid (e.g. 2).

Mixture
<b>For</b> <b>Age</b> <b>Sex</b> <b>Address</b>  <b>Rx</b> Light kaolin: 2.0 g Light magnesium carbonate: 0.5 g Sodium bicarbonate: 0.5 g Peppermint water: q.s. 15 ml Make mixture, send 4 doses <b>Signa:</b> One dose to be taken three times a day <b>Type:</b> Mixture containing diffusible solid  <b>Date of dispensing:</b> <b>Dispensed by:</b> <b>Name and address of pharmacy:</b>

### Theory

Sodium carbonate is a soluble substance, whereas light kaolin and light magnesium carbonate are diffusible solids. So method for mixtures containing diffusible solids is to be followed.

### Procedure

Take calculated amount of magnesium sulphate and light magnesium carbonate in a mortar and mix properly. Measure 3/4th of the vehicle. Triturate with small amount of vehicle to form a smooth cream. Then add remaining volume of vehicle with constant trituration. Filter it if any foreign particles are visible by using a piece of muslin cloth. Adjust the final volume by adding more of the vehicle. Transfer the mixture in a clean bottle, label it with the direction "Shake the bottle before use".





**Use**

As antacid mixture.

*Light kaolin* is a good absorbent. It forms protective coating on intestine. So it is used in treatment of enteritis, colitis, dysentery, etc. associated with food poisoning.

*Light magnesium carbonate* acts as antacid.

*Sodium bicarbonate*: Also acts as antacid and potentiates the action of light kaolin.



## Experiment 4: Dispensing of Prescription

### Object

Dispensing of prescription containing therapeutic incompatibility.

Powder
<b>For</b> <b>Age</b> <b>Sex</b> <b>Address</b>  <b>Rx</b>  Codeine phosphate: 0.5 g Light magnesium carbonate: 0.5 g Make powder, send such six <b>Signa:</b> One to be taken every night <b>Type:</b> Therapeutic incompatibility  <b>Date of dispensing:</b> <b>Dispensed by:</b> <b>Name and address of pharmacy:</b>

### Theory

Drugs are prescribed to the patient with the intention to produce specific action but the action produced is different from that intended by the prescriber. It may result due to overdose, wrong dose, antagonistic and synergistic drugs, etc.

### Procedure/Explanation

The above prescription is an example of a therapeutic incompatibility of overdose. Here overdose of codeine phosphate has been prescribed. Instead of prescribing 5 mg of codeine phosphate, the physician prescribed 0.5 g which is an error or mistake. Therefore, this prescription should not be dispensed and must be referred back to the prescriber.



## Experiment 5: Dispensing of Prescription

### Object

Dispensing of prescription containing chemical incompatibility of strychnine hydrochloride.

Mixture
<b>For</b> <b>Age</b> <b>Sex</b> <b>Address</b>  <b>Rx</b>  Strychnine hydrochloride: 6 ml Light magnesium carbonate: 4 ml Water ad: 120 ml Make a mixture, send 60 ml <b>Signa:</b> One tablespoonful to be taken twice a day <b>Type:</b> Chemical incompatibility of alkaloidal salts with alkaline substances.  <b>Date of dispensing:</b> <b>Dispensed by:</b> <b>Name and address of pharmacy:</b>

### Explanation

Aromatic spirit of ammonia is an alkaline liquid and strychnine hydrochloride is an alkaloidal salt. They react together to form ppt. of strychnine. The quantity of strychnine hydrochloride prescribed is much more than its solubility (1 in 60). Here alcohol present in aromatic spirit of ammonia is also very small. So strychnine gets precipitated which is diffusible in nature. Therefore, follow the method for precipitate yielding combinations.

### Procedure

Divide the vehicle in two equal parts, in one part dissolve aromatic spirit of ammonia and in the other part dissolve strychnine HCl. Combine the two solutions with constant stirring. Transfer the mixture to the bottle, label and dispense. Write instruction on label: **"Shake the bottle before use"**.

### Use

Aromatic spirit of ammonia is a stimulant, whereas strychnine HCl acts as a bitter tonic.



## Experiment 6: Dispensing of Prescription

### Object

Dispensing of prescription containing chemical incompatibility of sodium salicylate.

Mixture
<b>For</b> <b>Age</b> <b>Sex</b> <b>Address</b>  <b>Rx</b> Sodium salicylate: 5 g Syrup of lemon: 20 ml Water up to: 75 ml Make a mixture, send 60 ml <b>Signa:</b> 15 ml pro dose, to be taken as directed <b>Type:</b> Chemical incompatibility (adjusted incompatibility)
<b>Date of dispensing:</b> <b>Dispensed by:</b> <b>Name and address of pharmacy:</b>

### Explanation

Syrup of lemon contains citric acid. It reacts with sodium salicylate to form precipitates of salicylic acid which are indiffusible in nature. In this prescription syrup of lemon is used as flavouring agent which can be replaced without altering the therapeutic action of the formulation. Therefore, replace syrup of lemon with 19 ml of simple syrup and 1.2 ml of tincture lemon.

### Procedure

Dissolve sodium salicylate in small amount of vehicle. To this add simple syrup and tincture lemon with constant stirring. Adjust the final volume by adding more of vehicle. Transfer the mixture to a bottle, label and dispense.

### Use

It is used as an antirheumatics.





**VIVA VOCE/ SYNOPSIS**

- Q1.** Define prescription.  
**Q2.** What is inscription?  
**Q3.** What are legal compliances?  
**Q4.** Enlist the main parts of the prescription.  
**Q5.** Define incompatibility.  
**Q6.** What are steps for completeness of a prescription?  
**Q7.** What is refill in the prescription?  
**Q8.** What is the modern concept of writing prescription?

**MCQs**

- Q1.** Rx symbol represents:  
 (1) Superscription (2) Recipe (3) Take thou (4) All of the above
- Q2.** What part of prescription contains detail of prescribed ingredients?  
 (1) Superscription (2) Inscription (3) Subscription (4) Sig.
- Q3.** Directions are given to the patient in which part of the prescription:  
 (1) Superscription (2) Inscription (3) Subscription (4) Sig.
- Q4.** Prescriber's directions are given to the pharmacist in which part of the prescription:  
 (1) Superscription (2) Inscription (3) Subscription (4) Sig.
- Q5.** English meaning of cibos is:  
 (1) Food (2) Meals (3) Both (4) None
- Q6.** Mitte talis means:  
 (1) Send (2) Send such (3) Mixture (4) Morning
- Q7.** SOS means:  
 (1) Solve (2) Solution (3) Severe (4) When necessary
- Q8.** h.s. means:  
 (1) At bed time (2) An hour (3) Half (4) Heavy

**Ans**

- Q1.** (4)      **Q2.** (2)      **Q3.** (4)      **Q4.** (3)      **Q5.** (3)      **Q6.** (2)      **Q7.** (4)  
**Q8.** (1)

