



PRESCRIPTION

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INTRODUCTION

- It is an order written by a physician, dentist, veterinarian or a registered medical practitioner (RMP) to a pharmacist to compound and dispense a specific drug for the patient. OR
- Prescription is a written order for medication, issued by physician or RMP. Prescription is relationship between physician and pharmacist.

Physician (RMP) → Pharmacist → patients

Cont...

- The word "prescription" is derived from the *Latin* term *praescriptus*.
(Prae - 'before' and scribere- meaning 'to write').
- Prescription means 'to write before' which means prescription had to be written before a drug could be compounded and administered to a patient.

PARTS OF A PRESCRIPTION

A typical prescription consists of the following parts:

1. Prescriber office information
2. Date
3. Patient information (Name, Age, Sex And Address Of The Patient)
4. Superscription (symbol R)
5. Inscription (Medication prescribed)- Main part of prescription
6. Subscription(Direction to Pharmacist/Dispenser)
7. Signatura or Transcription (Direction for Patient)
8. Renewal instructions
9. Prescriber's signature and registration number.

1. Physician (Prescriber) office Information:

Information about physician is essential so that the patient could be contact in emergency. Following information is mentioned on the prescription

- i. Doctor's or office name.
- ii. Address with phone number and e-mail.
- iii. Prescription number, (required when calling the pharmacy for a refill)

2. Date

It helps a pharmacist to find out the date of prescribing.

It also helps in know when the medicines were last dispensed if the prescription is brought for redispens.

In case of habit forming drug the date prevents the misuse of the drug by the patient

3. Patient information

PATIENT INFORMATION (Name, Age, Sex and Address of the Patient)

Name and address of the patient for identification purpose.

Age and sex of the patient is required for child patient to check the prescribed dose.

4. SUPERScription (symbol R̄)

It is represented by R̄ (Latin term) „recipe“ which means „take thou“ or „you take“.

In olden days, the symbol was considered to be originated from the sign of Jupiter.

Jupiter is the Greek God of healing.

This symbol was use for requesting God for the quick recovery of the patient.

5. INSCRIPTION (Medication prescribed)

It is the main part of the prescription.

It contains the names and quantities of the prescribed medicaments.

The medicament may be official preparation or nonofficial preparation.

- a.) Official preparation (i.e. from pharmacopoeia) – Only name of the preparation is written E.g. Piperazine Citrate Elixir IP
- b.) Nonofficial preparation- Quantity of each ingredient will be given and type of preparation will also be given

6. SUBSCRIPTION (Direction to Pharmacist)

In this part the prescriber gives direction to the pharmacist) Regarding the dosage form to be prepared.

b) Number of doses to be dispensed.

7. SIGNATURA (Direction for Patient)

To be placed on the label.

It is usually written as „Sig.“.

The signatura written in english and use some *Latin abbreviations like t.i.d (thrice a day), b.i.d (twice a day) and o.d (once a day).*

Cont..

Instructions should be written on the label of container so that the patient can follow them.

The instructions may include-

- a) Quantity to be taken(dose of drug)
- b) Frequency and timing of administration of the preparation
(dose interval)
- c) Route of administration
- d) Special instruction (if any)

8. RENEWAL INSTRUCTIONS

The number of times a prescription is to be repeated is written by the physician.

It is very important for the case of habit forming drugs to prevent its misuse.

9. PRESCRIBER'S SIGNATURE AND REGISTRATION NUMBER

The prescription must be signed by the prescriber by his / her own hand.

Registration number should be written in the case of dangerous and habit forming drugs.

TYPES OF PRESCRIPTION

Prescriptions can be classified as

- a) Compounded prescription

- b) Noncompounded prescription

a). Compounded prescription-

Also known as extemporaneous prescription.

It is an order that requires mixing of one or more ingredients (active medicaments).

It contains several ingredients which are divided into the following parts:

- (a) Base: The active medicaments (Produce the therapeutic effect).
- (b) Additives-1) It enhances the action of the drug.

Cont...

2) It makes the preparation more elegant (attractive) and palatable.

(c) Vehicle: It is the main carrier of the drug. E.g. -In liquid preparations solvent (water) used as vehicle.

Now a day's compounding is omitted from prescription.

E.g. Sodium bicarbonate -3g
 Simple Syrup -6ml
 Purified Water (q.s.)- 100ml

b). Non-compounded prescription

Does not require compounding of pharmaceutical product.

Precompounded drugs supplied by a pharmaceutical company by its official or proprietary name.

Legal Requirements for a Valid Prescription

1. Prescription should be written in indelible (can not erased) ink (may be handwritten or computer generated)
2. Prescription must be signed in indelible ink by the practitioner using his own name.
3. Prescription must be dated by the prescriber.
4. Prescription should state address of the practitioner
5. if issued by a dentist the words „for dental use only

Cont...

6. Prescription always writes legibly.
7. Prescription always space out words and numbers to avoid confusion.
8. Prescription always contains complete medication orders.
9. Avoid abbreviations.

CONT...

Now a day's electronic prescriptions use, to minimize medication errors.

The use of Latin word in prescription writing is traditional.

Now a day's Latin has slowly gone.

example

MICHAEL ROBERTS, M.D.
344 City Heights
New York, NY 10023

Name Mary Schmidt
Address 532 Park Lane Blvd, NY, NY 10023 Date 4/1/18

Rx

Dexcom G6 Receiver Dispense 1 / 0 Refills
Dexcom G6 Transmitter Dispense 1 / 3 Refills
Dexcom G6 Sensors Dispense 1 box
(3 sensors/1-month supply) / 12 refills
Use As Directed

Dr. M. Roberts
(Signature)

Latin Terms Latin term / phrases Abbreviation

Semel in die or omne in die	o.d.	Once a day
Bis in die, Bis die	b.d	Twice a day
Ter in die, Ter die	t.i.d	Thrice a day
Quartar in die	q.i.d., q.d	Four times a day
Si opus sit	s.o.s	When required

HANDLING OF PRESCRIPTION

The following procedures should be adopted by the pharmacist while handling the prescription for compounding and dispensing:

- I. Receiving
- II. Reading and checking
- III. Collecting and weighing the materials
- IV. Compounding, packaging and labeling

I. Receiving

The prescription should be received by the pharmacist.

While receiving a prescription, a pharmacist should not change his/her facial expression.

It gives an impression that he/she is confused or surprised after seeing the prescription.

II. Reading and checking

After receiving the prescription it should be screened behind the counter.

Prescription authenticity should be checked.

The signature of the prescriber and the date of prescription should be checked.

The pharmacist should read all the lines and words of the prescription.

He/she must not guess any word.

If there is any doubt, the pharmacist should consult with the other pharmacist or the prescriber over telephone.

(III). Collecting and weighing the material

Before compounding a prescription all the materials should be collected from the shelves or drawers.

All the materials kept in the left hand side of the balance. After measuring each material should be kept on the right hand side of the balance.

Cont...

After compounding of the prescription materials are replaced back to the shelves / drawers. While compounding every container of material should be checked thrice in the following manner:

- (i) When collected from the shelves/drawers.
- (ii) When the materials are measured.
- (iii) When the containers are replaced back to the shelves/drawers.

IV. Compounding, packaging and labeling

Only one prescription should be compounded at a time.

Compounding should be done on a clean table.

All equipment required should be cleaned and dried.

The preparation should be prepared according to the direction of the prescriber or as per methods given in pharmacopoeia or formulary.

The compounded preparations should be filled in suitable containers.

Label the container.

CARE REQUIRED IN DISPENSING PRESCRIPTION

1. The prescription must be carried with the pharmacist while taking the medicine out of the shelves.

2. The dispensing balance should always be checked before weighing any ingredient.

3. All the chemicals should be replaced back in to their original positions in the shelf.

4. Care should be taken to keep the balance clean after each measurement.

5. Liquid preparations for external use the label must display FOR EXTERNAL USE ONLY in red ink

6. Before handing over the medicine to the patient, again the preparation should be checked.

1. Abbreviation

In most of the prescriptions abbreviated terms are used by the prescriber that leads to major errors during interpretation by the pharmacists. E.g. „SSKI“ is the abbreviated term of „Saturated Solution of Potassium Iodide“.

It is preferable to avoid these types of misleading abbreviations.

2. Name of the drugs

Names of some drugs (especially the brand names) either look or sound alike. So any error in the name of a drug will lead to major danger to the patient. e.g. Althrocin – Eltroxin, Acidin – Apidin , Digoxin- Digitoxin etc.

3. Strength of the preparation

Drugs are available in the market in various strengths.

So a drug must not be dispensed if the strength is not written in the prescription. E.g. Paracetamol tablet 500mg should not be dispensed when no strength is mentioned in the prescription.

4. Communication failure

Failures during the process of patient management -

Includes illegible handwriting, incomplete prescribing order. Common errors include: „g“ mistaken for „mg“

5. Dosage form of the drug prescribed

Many drugs are available in more than one dosage forms. E.g. liquid, tablets, injections or suppositories.

The dosage form intended for the patient must be mentioned in the prescription to reduce ambiguity.

6.Dose

If unusually high or low dose is mentioned in the prescription then it must be consulted with the prescriber. Some time a sustained release (SR) dosage form is prescribed thrice or more times daily. Actually SR dosage forms should be given once or twice a day.

7. Instructions to the patient

Some times the instruction for a certain preparation is either omitted or mentioned partially. The route of administration should be mentioned clearly.

8. Incompatibilities

It is essential to check that there are no pharmaceutical or therapeutic incompatibilities in the prescription. If more than two medicines are prescribed then it is the duty of the pharmacist to see whether their interactions will produce any harm to the patient or not. Certain drugs have interactions with food. E.g, Tetracycline should not be taken with milk or antacid.

LABELING OF DISPENSED MEDICINES

After dispensing the medicine in a container, a label is attached by adhesive. The label on the dispensed medicines should provide the following information:—

1. Name of the preparation-

When the prescriber mentions the name in the prescription the same name must be displayed on the label.

Example

PIPERAZINE CITRATE ELIXIR IP

If it is a non-official preparation then the name of the dosage form should be given on the label.

e.g. THE MIXTURE, THE EMULSION, THE DUSTING POWDER

Cont...

2. The strength of the medicine-

The strength of the active ingredient in the preparation must be displayed if it is intended for internal (oral) purpose. The amount in each unit of dose should be mentioned.

e.g. In case of oral liquids “Each 5ml contains 250mg”

e.g. In case of tablet “Each tablet contains 500mg”.

Cont..

The values must be written in whole numbers and if decimal is not avoidable then a zero is placed before the decimal point. E.g. instead of 0.1g it should be 100mg, and instead of .5% it should be 0.5%. In case of an official preparation the strength is not required to be given, because the name with reference to the pharmacopoeia is sufficient.

E.g. CHLORAMPHENICOL ORAL SUSPENSION
IP.

T H A N K

Y O U