PRESCRIPTION

By

(Dr.) Swarnakshi Upadhyay

Assistant Professor

SOPS, CSJMU

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 ------ Pharmacist ------ Patients

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, gender and address of the patient)
4. Superscription (symbol ℞)
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 Information

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

- Doctor's or office name.
- Address with phone number and e-mail.
- 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 redispense. In case of habit forming drugs the date prevents the misuse of drugs by patients.

3. PATIENT INFORMATION

It includes Name, age, gender and address of the patient. Name and address of the patient for identification purpose. Age and gender of the patient is required to check the prescribed dose according to their body requirements.

4. SUPERSCRIPTION (*symbol* **℞**)

It is represented by symbol **℞** which is an abbreviation of Latin word. The **℞** means recipe meaning take thou or you take. The symbol originated from the sign of Jupiter, god of healing. This symbol was then employed for requesting god the quick recovery of patients.

5. INSCRIPTION (*Medication prescribed*)

It is the main part of the prescription which contains the names and quantities of the prescribed medicaments. The medicament may be,

1. Official preparation – Only name of preparation is written.
2. 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 and also the no. of doses to be dispensed.

7. Signatura (Direction for Patient)

To be placed on the label. It is usually written as 'Sig.'. The signatura is written in English and use some Latin abbreviations like ***tid*** *(thrice a day),* ***bid*** *(twice a day) and* ***od*** *(once a day).* Instructions should be written on the label of container so that the patient can follow them. The instructions may include,

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

8. Renewal instruction

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. Prescribers signature and registration

The prescription must be signed by the prescribers own hand. Registration number should be written in the case of dangerous and habit forming drugs.

TYPES OF PRESCRIPTION

Prescriptions can be classified as,

1. 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,

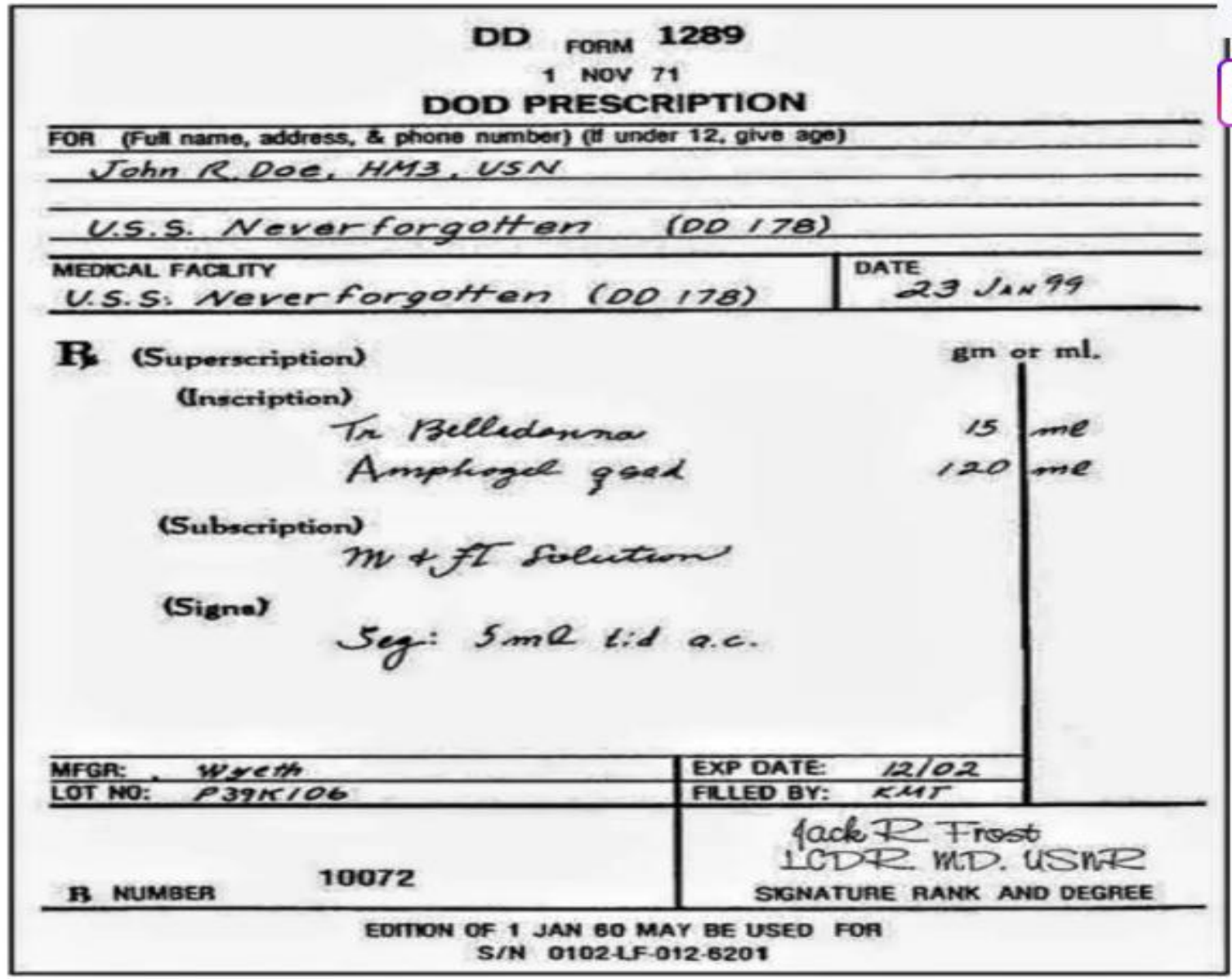
- Base – The active medicaments (Produce the therapeutic effect).
- Additives - It enhances the action of the drug and it makes the preparation more elegant and palatable.
- Vehicle - It is the main carrier of the drug.
  Eg, - In liquid preparations solvent (water) used as vehicle.

2. Non-compounded prescription – this type of prescription does not require the compounding of pharmaceutical product. Precompounded drugs supplied by a pharmaceutical company by its official or proprietary name.

Legal Requirements for a Prescription

1) Prescription should be written by ink (handwritten or computered)
2) Prescription must be signed 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 use the words for dental use only.
6) Prescription should always writes neat and clean.
7) Prescription should always space out words to avoid confusion.
8) Prescription always contains complete medication orders.
9) Avoid abbreviations.

Example



DD FORM 1289
1 NOV 71
DOD PRESCRIPTION

FOR (Full name, address, & phone number) (If under 12, give age)
John R. Doe, HM3, USN

U.S.S. Neverforgotten (DD 178)

MEDICAL FACILITY
U.S.S. Neverforgotten (DD 178)

DATE
23 JAN 99

℞ (Superscription)

gm or ml.

(Inscription)
Tr Belladonna 15 ml
Amphogel qsad 120 ml

(Subscription)
M + Ft Solution

(Signa)
Sig: 5ml t.i.d a.c.

MFGR: Wyeth
LOT NO: P39K106

EXP DATE: 12/02
FILLED BY: KMT

℞ NUMBER 10072

Jack R Frost
LCDR MD USNR
SIGNATURE RANK AND DEGREE

EDITION OF 1 JAN 60 MAY BE USED FOR
S/N 0102-LF-012-6201

HANDLING OF PRESCRIPTION

Prescription handling is a sequential process in which pharmacist or compounder directly receives the prescription from physician and proceeds to dispense the prescribed formulation. The steps involved in handling of prescription are as follows,

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

1. **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 which may cause the patients to think that he/she might not know how to compound the given prescription.

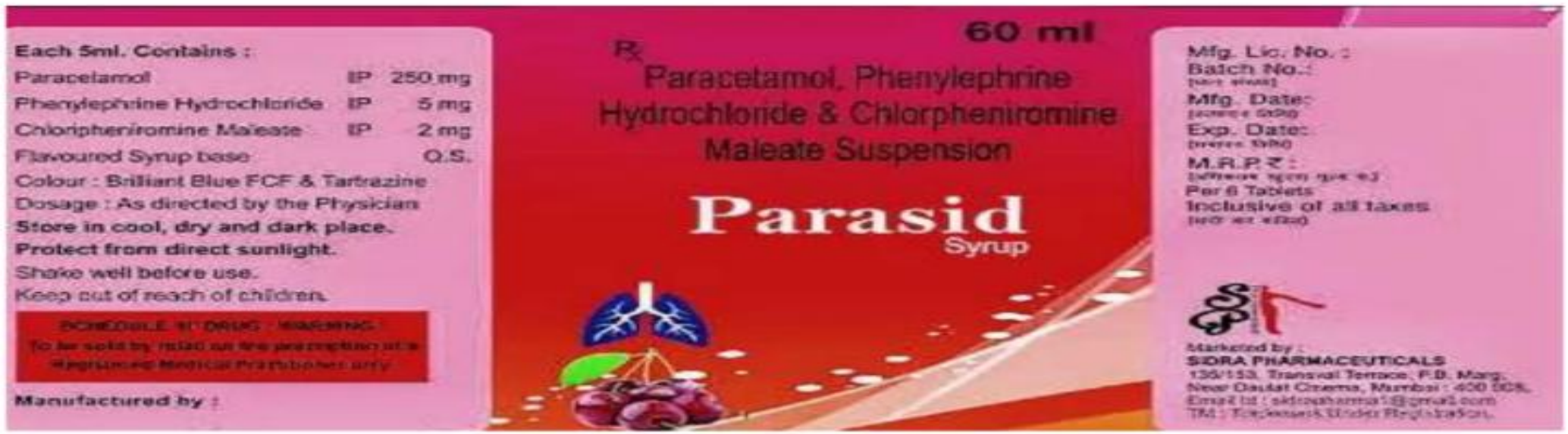
2. **Reading and checking** - After receiving the prescription, it should be screened behind the counter. Prescription authenticity should be checked. The signature of the prescriber and the date of prescription should be checked. The pharmacist should read all the lines and words of the prescription. They must not guess any word. If there is any doubt, the pharmacist should consult with the other pharmacist or the prescriber over telephone. And while discussing the conversation should be very clear.

3. Collection and weighing of 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. After compounding of the prescription materials are replaced back to the shelves. While compounding every container of material should be checked thrice in the following manner,

- When collected from the shelves/drawers.
- When the materials are measured.
- When the containers are replaced back to the shelves/drawers.

4. Compounding - 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.

5. Finishing and labeling – The finished product after compounding should check for the checkpoints if formulated properly or not. Eg, the comparison with standard colour, odour and texture. Then compounded preparations should be filled in suitable containers. Label the container with proper and all necessary instruction for patients on it.



CARE REQUIRED IN DISPENSING PRESCRIPTION

- The prescription must be carried with the pharmacist while taking the medicine out of the shelves.
- The dispensing balance should always be checked before weighing any ingredient. (Calibration)
- All the chemicals should be replaced back to their original positions in the shelf.
- Care should be taken to keep the balance clean after each measurement.
- Liquid preparations for external use, the label must display FOR EXTERNAL USE ONLY in red ink.
- Before handing over the medicine to the patient, again the preparation should be checked.

Errors

1. **Abbreviation -** In most of the prescriptions abbreviated terms are used by the prescriber that leads to major errors during interpretation by the pharmacists. Eg, SSKI is the abbreviated term of Saturated Solution of Potassium Iodide
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 danger to the patient. Eg, Althrocin – Eltroxin.
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. Eg, Paracetamol tablet 500 mg 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. Eg, 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. Sometimes a sustained release dosage form is prescribed thrice or more times daily. Actually SR dosage forms should be given once or twice a day.

7. Instructions to patients - Sometimes the instruction for a 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 if their interactions will produce any harm to the patient or not. Certain drugs have interactions with food.

Latin Terms Abbreviation

Omne in die	od	Once a day
Bis in die, Bis die	bid	Twice a day
Ter in die, Ter die	tid	Thrice a day
Quartar in die	qid	Four times a day
Si opus sit	sos	When required
Ante cibum	ac	Before meal
Post cibum	pc	After meal
Gutta	gt	Drop
Hora somni	hs	At bedtime
Oculus dexter	od	Right eye
Oculus sinister	os	Left eye
Per os	po	By mouth
Pro re nata	prn	As needed
Quaque die	qd	Every day
Quaque 3 hora	q3h	Every 3 hours

LABELING OF DISPENSED MEDICINES

After dispensing the medicine in a container, a label is attached by adhesive. The label on the dispensed medicines containers 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. Eg, Piperazine citrate elixir IP.
2. **The strength of the medicine** - The strength of the active ingredient in the preparation must be displayed if it is intended for internal purpose. The amount in each unit of dose should be mentioned. Eg, In case of oral liquids "Each 5ml contains 250 mg" and in case of tablet "Each tablet contains 500 mg".
3. **The values** – it must be written in whole numbers and if decimal is not avoidable then a zero should placed before the decimal point. Eg, for 0.1g it should be 100 mg and instead of .5% it should be 0.5%.
4. **Strength** - In case of an official preparation the strength is not required to be given, because the name with reference to the pharmacopoeia is sufficient. Eg, Chloramphenicol oral suspension IP