

DRUG STORE MANAGEMENT AND INVENTORY CONTROL

DRUG STORE:

A drug store /pharmacy /community pharmacy chemists is a retail shop which provides prescription drug among other products.

Every hospital should have a medical store for the purpose of procuring, stocking and distributing the drug and medicine to various department.

ORGANISATION OF DRUG STORE:

Store and define as sub – organization in any hospital where material obtain or held in abeyances. Till inspected approved and stop. A drug store of department for regular flow of material the condition storage should be proper.

TYPES OF MATERIAL:

Significant no of racks should be provided for storage of drug and supplies.

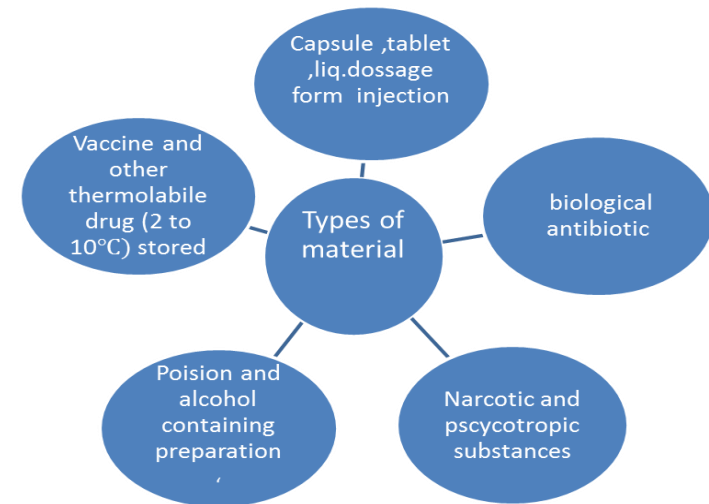


Fig. no.1- Types of materials

STORAGE OF CONDITION:

Cold storage : 2 to 8°C

Cool temperture:8 to 25°C

Warm:30 to 40°C

Excessive heat: Above 40°C

RT temperature : temperature prevailing in working area.

LIST A: VACCINE

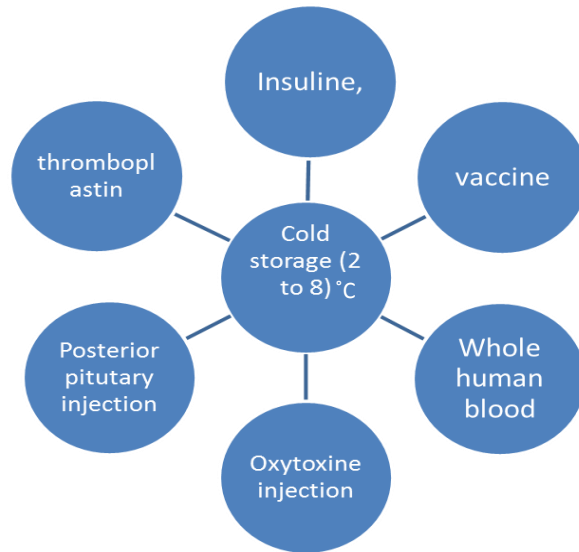


Fig. No.2- List A: vaccine

LIST B:



Fig. No.3- List B

PURCHASE AND INVENTORY CONTROL:

The basic purpose of purchase is to insure continuous flow of raw material of right quality , right quantity, right price and form right sources.



Fig. No.4- Purchases and Inventory Control

PURCHASE PROCEDURE OF DRUG STORE MANAGEMENT

Purchase procedure involes different steps procrument of goods:

Determination of re Source of supply.

PURCHASE ORDER:

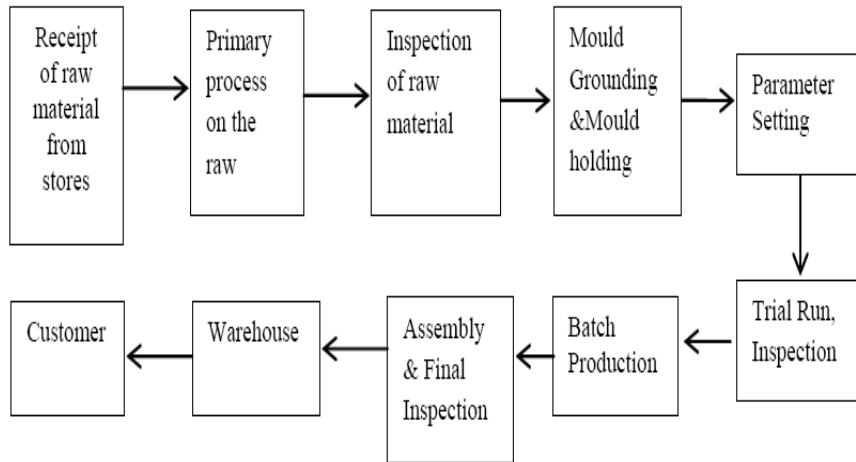


Fig. No.5- Purchase Order

PROCUREMENT AND STOCKING:

Procurement is defined as process as a acquiring supplies through purchase from the manufacturers their agent like distributors or from private and public suppliers



Fig. No.6- Strategies

ECONOMIC ORDER QUANTITY:

Refers to optimum quantity of an item that should be order at a point in time .it helps to avoid over spending in item, minimize the ordering and the holding cost associated with the item.



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Fig. No.7- Economic Order

INVESTIGATIONAL USE OF DRUG:

INTRODUCTION:

Any drug or place which is being tested or used as refers in clinical trials, including a registered drug used in different formulation or used for an unapproved indication or used in doses outside the approved ranges is called investigational drug.

PRINCIPLE:

Hospital are the primary centers for clinical investigational on drug. By the definition of these are drug which have not yet been released by federal food and drug ad. For general use. These drugs are involved in dosage form in available, detection and uses, side effect and symptoms of toxicity, etc.

CLASSIFICATION OF INVESTIGATIONAL DRUG: ON THE BASIS OF HOSPITAL RESEARCH PROGRAM:

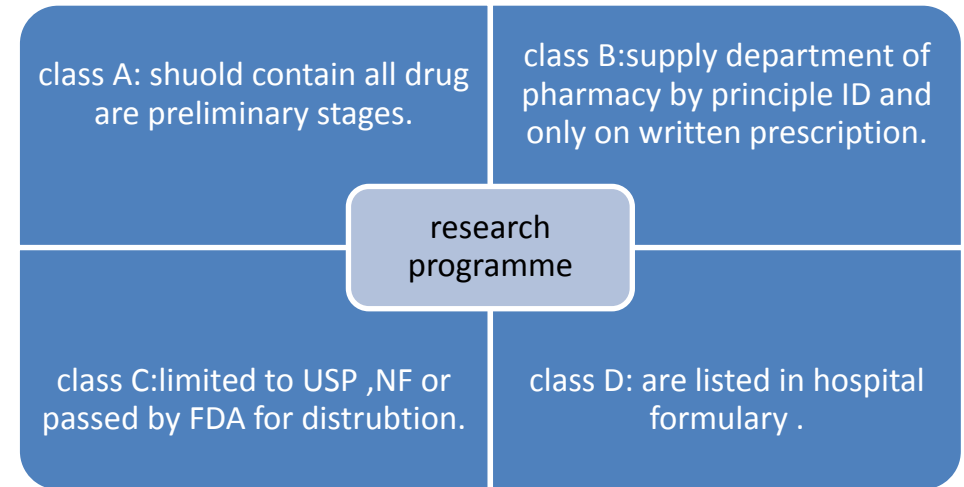


Fig. No.8- Classification of investigational drug

ON THE BASIS OF HOSPITAL PHARMACY OPERATION:

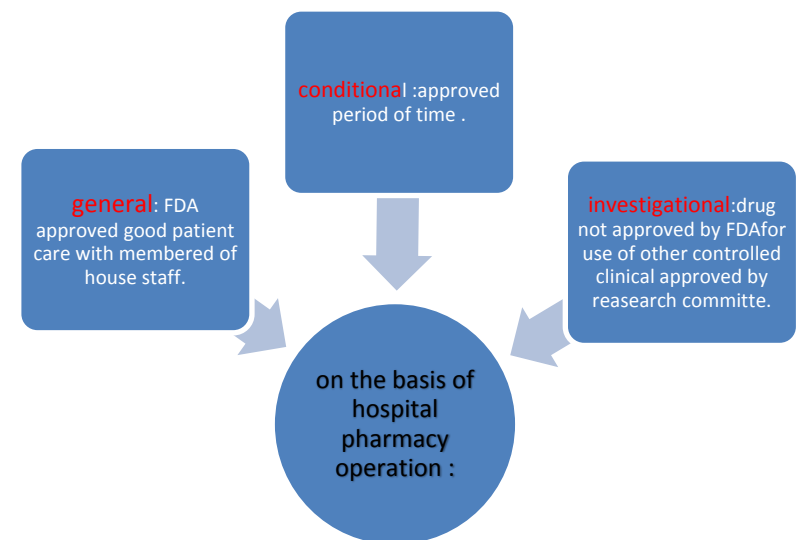


Fig. No.9- Basis of Hospital Pharmacy Operation

CONTROL OF INVESTIGATIONAL USE OF DRUG:

All investigational drug should be registered with pharmacy and therapeutic committee.

The control of investigational drug forms are usually titled.

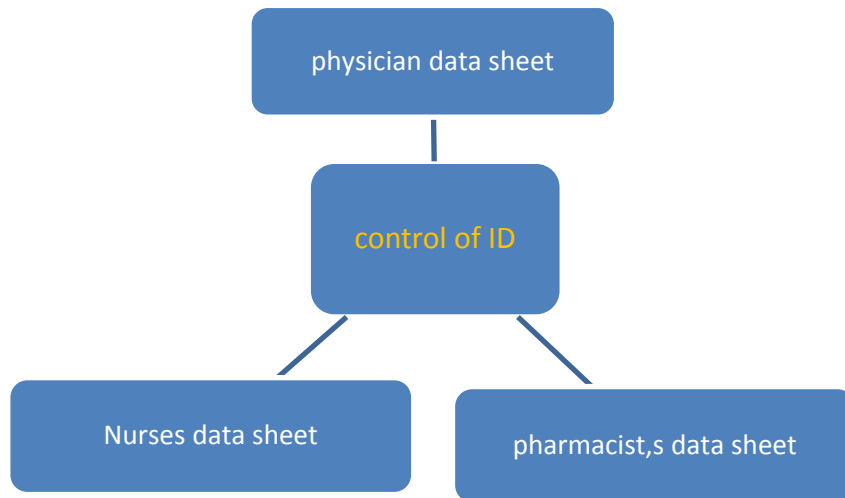


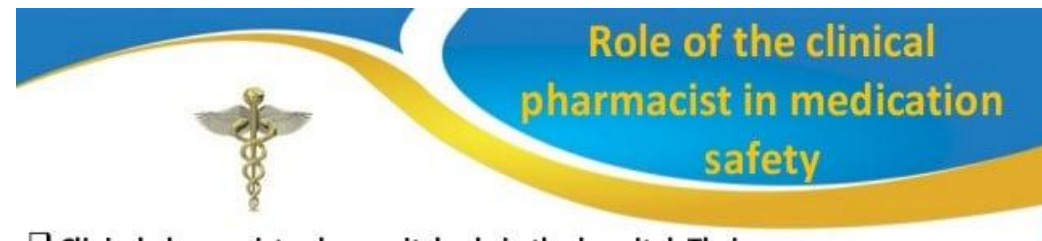
Fig. No.10- Control of ID

IDENTIFICATION OF INVESTIGATIONAL USE OF DRUG:

Whenever class A and class B drug are dispensed from the pharmacy. They should be labeled in such manner as to diff. them routine prescription drug. In some hospital, in red ink or

white paper stock .in addition to commonly required information are:

Patient name
Data
Prescription numbers
Doctors name
Direction for use
Space for research drug no. is provided.



❑ Clinical pharmacists plays a vital role in the hospital. Their role are as follows-

- Prescription monitoring.
- Medication history-taking and medicines reconciliation.
- Communicates patient information to the physician.
- Assist physician to select drug product, dosage form and schedules.
- Patient education and counseling.
- Monitoring the patients total therapeutic drug level, effectiveness, side effects, toxicities, allergic drug reactions, drug interactions and appropriate patient outcome.
- Provide drug information to the patient, medical & nursing stuffs.



Fig. No.11- Role of clinical pharmacist

ADVISORY COMMITTEE:

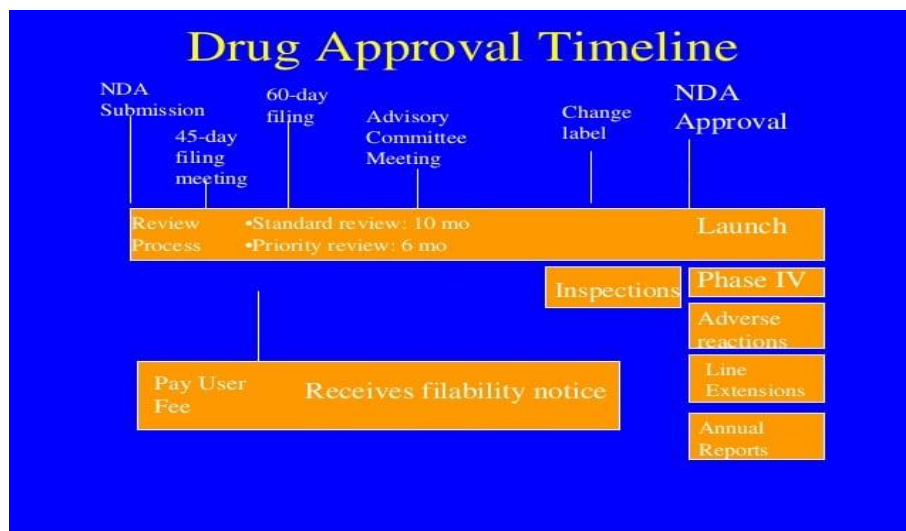


Fig. No. 12- Advisory committee

INTERPENETRATION OF CLINICAL LABORATORY TESTS:

BLOOD CHEMISTRY:

A test done on a sample of blood to measure the amount of certain substances in the body. These substances include electrolytes (such as sodium, potassium and chloride), fats, proteins, glucose (sugar), and enzyme.

PARAMETERS FOR BLOOD CHEMISTRY:

Parameters	Normal range	Mean	SD
Hemoglobin (g/dL)	13.2–17.3	14.2	1.3
Erythrocyte ($10^6/\mu\text{L}$)	4.4–5.9	5.44	4.51
Hematocrit (%)	40.0–52.0	41.4	3.36
Leukocyte ($10^3/\mu\text{L}$)	3.8–10.6	7.4	1.55
Thrombocyte ($10^3/\mu\text{L}$)	150–440	275.4	94.1
Lymphocyte (%)	25.0–40.0	32.8	7.08
Serum cholinesterase (IU/L)	5.32–12.92	9.02	1.01
BUN (mg/dL)	6.0–20.0	12.5	3.45
Serum creatinine (mg/dL)	0.7–1.3	0.9	0.17

SD: standard deviation; BUN: blood urea nitrogen.

Table No. 1- Parameters for blood chemistry

HEMATOLOGY TESTS:

Hematology tests include tests on the blood, blood proteins and blood producing organs. These tests can evaluate

Hemoglobin (Hgb)

Hematocrit (Hct)

Red blood cell (RBC)

White blood cell (WBC)

Platelet count

	Adult Male	Adult Female	Age 1 to 3 mo
RBC ($\times 10^6/\mu\text{L}$)	5.46–7.94	5.11–6.51	5.15–6.48
PCV (%)	33–50	31.0–48.6	38.1–44.1
Hgb (g/dL)	10.4–17.4	9.8–15.8	10.7–13.9
MCV (fL)	58.5–66.5	57.8–65.4	66.2–80.3
MCH (pg)	18.7–22.7	17.1–23.5	19.5–22.7
MCHC (%)	33–50	28.7–35.7	24.2–32.6
Platelets ($\times 10^3/\mu\text{L}$)	304–656	270–630	—
WBC ($\times 10^3/\mu\text{L}$)	5.5–12.5	5.2–10.6	4.1–9.79
Neutrophils (%)	38–54	36.4–50.4	18.8–46.4
Lymphocytes (%)	28–50	31.5–52.1	44.6–77.8
Eosinophils (%)	0.5–3.5	0.8–3.2	0–2.4
Basophils (%)	2.5–7.5	2.4–6.2	0.1–4.5
Monocytes (%)	4–12	6.6–13.4	0–13.1

Table No. 2- Hematology tests

URINE ANALYSIS TESTS:

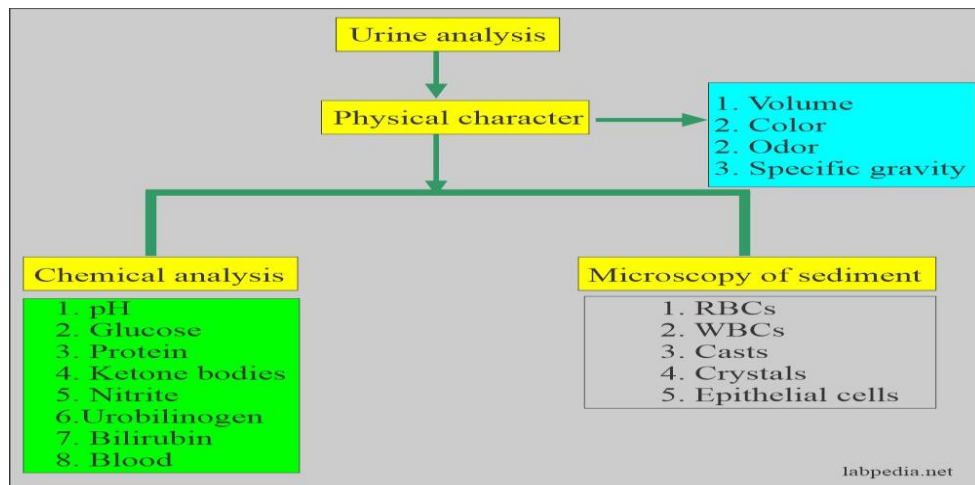


Fig. No.13- Urine Analysis

URINE ANALYSIS PARAMETERS:

Laboratory test	Patient value	Normal range
Blood^a		
Hemoglobin (g/l)	131	120–160
Leukocyte count (cells/ μl)	12,340	4,800–10,000
Glucose (mmol/l) ^c	13.1	3.9–6.4
Blood urea nitrogen (mmol/l)	27.1	7.1–35.7
Creatinine ($\mu\text{mol/l}$) ^d	67.2	44.2–97.2
Arterial pH	7.34	7.35–7.45
Urine^b		
Epinephrine ($\mu\text{g}/24\text{ h}$)	60	0–20
Metanephrine ($\mu\text{g}/24\text{ h}$)	3,232	0–1,000
Norepinephrine ($\mu\text{g}/24\text{ h}$)	63.4	15–80
Normetanephrine ($\mu\text{g}/24\text{ h}$)	373	109–500
Dopamine ($\mu\text{g}/24\text{ h}$)	222	65–400

Table No. 3

CONSTITUENTS OF URINE:

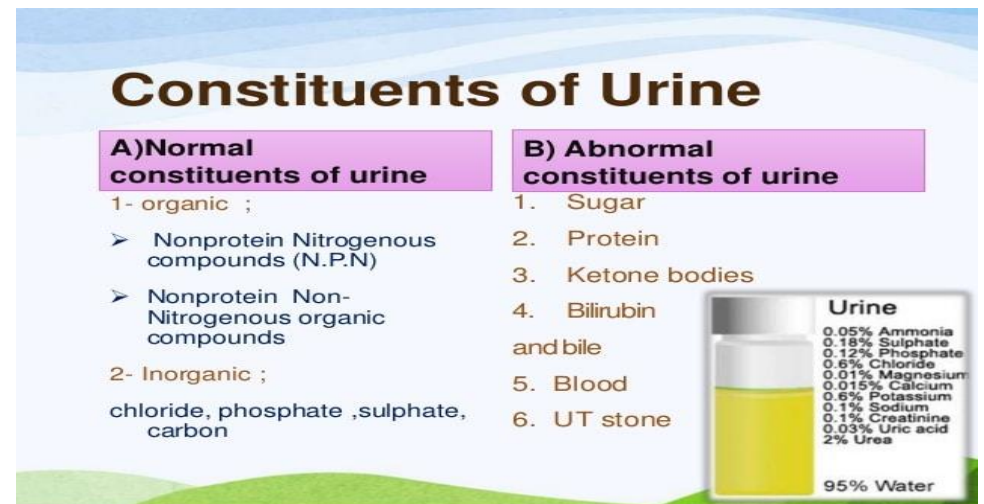


Fig. No.14- Constituents of Urine

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