SAINIK PHARMACY COLLEGE

Mai, Devkali, Hanumanganj, Prayagraj, Uttar Pradesh- 221505

A Project Report on

Hospital Training-I (BP509P)

Submitted In Partial Fulfilment of the Requirement

For the Degree of

BACHELOR OF PHARMACY

Ms. ANJALI YADAV

(211117050012787)

BACHELAR OF. PHARMACY 3 YEAR

Under the Supervision of

DR. VIRENDRA SINGH
Professor

Co-supervisesd by
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Assistant professor

SAINIK PHARMACY COLLEGE, PRAYAGRAJ, U.P.

To the Faculty of Pharmacy

Dr. APJ ABDUL KALAM TECHNICAL UNIVERSITY
LUCKNOW. U.P.

2023-24

SAINIK PHARMACY COLLEGE

Mai, Devkali, Hanumanganj, Prayagraj, Uttar Pradesh- 221505

CERTIFICATE

Name: **Anjali yadav**

Class: **Bachelor of pharmacy**

Enrolment No**:21111705001277**

Subject: **Hospital Training Report – I(BP-509P)**

Name & full address of the organization visited**: Swarooprani hospital Prayagraj.**

This is certified that this report represents bona-fide training of the student in the hospital during the academic session 2023-24.

Hospital training done on **04.09.23to20.10.23** The report is complete / incomplete in all respect.

Date: …….

Signature
(INTERNAL EXAMINER)

Signature
(EXTERNAL EXAMINER)

DIRECTOR

SAINIK PHARMACY COLLEGE

IAI, DEVKALI, HANUMANGANJ, PRAYAGRAJ

Approved by Pharmacy Council of India

by-(1117) Dr. A.P.J. Abdul Kalam Technical University Uttar Pradesh

(4130) Board of Technical Education Lucknow

CERTIFICATE BY THE SUPERVISOR

I hereby certify that **Ms. Anjali yadav** has completed her hospital training-Ifor BACHELOR OF PHARMACY degree. I further certify that the work done by her is of his own and original and tends to the general advancement of knowledge. For the report that she is submitting,she has not been conferred any diploma or degree or distinction by either this university or other university according to the best of my knowledge.

I am satisfied with her report on hospital training-I and I recommend for the submission.

Place:PRAYAGRAJ

Date:

SUPERVISOR

Dr. Virendra Singh
(Professor)

Co-Supervisor

MR. Dharam raj verma
(Assistant Professor

DECLARATION

I hereby declare that this Training is a bonafide training work carried out by me from **Swarooprani Nehru Chikitsalya** The contents of the training do not from the basic for the award of any other degree candidate or to anybody else from this or any other University/Institution.

Place: Prayagraj

Date:

ANJALI YADAV

ACKNOWLEDGEMENT

This is my proud privilege to be attached to **Swaruprani Nehru Chikitsalaya** prayagraj. It is highly professionalized hospital with modern outlook. I have learned first aid (wound dressing ,artificial respiration etc) , different root of injection, study of patient observation charts, prescription and dispensing, simple diagnostic reports etc. during my training duration of **45 days (04.09.23-20.10.23)** and contain has been fortunate in getting and opportunity of working in this Hospital I would like to thanks **Mr. Kamlesh Tripathi(Chief Pharmacist)** providing necessary training facilities and guidance during entire period of my training. I would like to thanks all trainees and staffs, who helped me very much and without whom support and guidance it was impossible for me to complete the project successfully. I would like to express my gratitude towards my **Director Dr. Virendra Singh (professor) & Mr. Dharam raj verma(Associate professor) of Sainik Pharmacy College** for their kind co-operation and encouragement which help me in completion of this project.

ANJALI YADAV
B PHARMA 5th Semester
Roll.NO 2111170500013

CONTENT

INTRODUCTION TO HOSPITAL

A hospital is a healthcare facility that provides specialized medical and nursing care as well as medical supplies to patients. The most well known form of the hospital is the general hospital , which usually carries an emergency department to handle urgent health issues such as fire and accident victims as well as medicinal emergencies .

fig:-1.1 hospital

According to the hospital definition , a district hospital is usually the region's primary healthcare facility, with a large number of intensive- care beds and extra beds for patients who need long- term care . Trauma centres, children's hospitals, rehabilitation hospitals , hospitals, and senior's (geriatric) hospitals, for coping with particular medical conditions such as psychatric care are also examples of specialized hospitals can help save money on health care. Based on the source of revenue , hospitals are categorized as general, specialized, or government.

A teaching hospital integrates patient care with medical students as well as nurse education . A clinic is a care facility that is smaller than that of a hospital . A hosp[ital's department's (such as surgery and urgent care) and speciality units (such as cardiology) are diverse. Outpatients departments and chronics care centers are available at certain hospitals . Pathology , pharmacy , and radiology are examples of common support units .

QUALITY AND SAFETY

As the quality of health care has become more of a concern around the world , hospitals had to pay more attention to the issue . One of the most powerful ways to analyze this component of health care is through independent external quality assessment, and hospital accreditation is source from other countries in many parts of the world, A phenomenon known as international health care accreditation.

DIFFERENT DEPARTMENTS IN HOSPITALS

Below given are the details of different departments in the hospitals:-

- Outpatient department (OPD), Surgical department , Inpatient department , Nursing department, Physical medicine , Paramedical department , Operation theatre complex (OT) , Radiology department (X-Ray) , and Non – professional services are some of the departments located in hospitals.
- A nursing department , led by a director of nursing or a chief of nursing officer , might exist in a hospital . Such a department has the responsibility of overseeing the hospital's clinical nursing practice , research and regulation.
- Numerous units also have nursing as well as medical director who also acts as a supervisor for their subject areas . A medical director , for instance , is in charge of doctors and medical treatment in an intensive care nursery , whereas the nursing manager is in charge of both nurses and nursing health care centres .
- Health records , technical support , disclosure of information , facilities management, clinical engineering , dining services, and plant operations , are exampes of support units.

HOSPITAL SERVICES

Hospital services refers to the clinical services provided by the hospital, as well as the operational activities that support those clinical services , which are funded in whole or in a part by the LHIN , and includes the type, volume , frequency, and availability of hospital services; HSAA indicator technical specifications refers to the document titled "HSAA Indicator technical specifications ," as amended or replaced from time to time .

Hospital services are the foundation of a hospital's services. They are frequently influenced by the demands or wishes of the hospital's key users, with the goal of making the hospital a one-stop or core institution of the local community or medical network. Hospitals are facilities with basic services and personnel – usually medicine and surgical departments- that provide clinical and other services for specific disease and ailments, as well as emergency care . Hospital services include everything from basic health care to training and research for major medical school centres , as well as services created by a network of industry-owned institutions such as health maintainance and organisations.

Below mentioned are some of the hospital services:-

- Emergency room services
- Short term hospitalization
- X-Ray/ radiology services
- General and speciality surgical services
- Blood services
- Laboratory services

Health maintainance organization hospitals supplement the basic list with a variety of specialized and auxillary services, such as :

- Pedatric special care
- Prescription services
- Good access to surgical specialists
- Rehabilitation services and physical therapy
- Home nursing services
- Mental health care
- Nutritional counselling
- Genetic testing and counselling
- Family support services financial services
- Case management or social work services.

FUNCTION OF HOSPITAL

Below mentioned are some of the functions of hospital\hospital use :-

- Medical hospital- medical hospital includes the treatment and management of patients by a team of doctors.
- Patient support provides nursing, nutritional diagnostic, counselling , pharmacy and medical supplies, all of which are directly related to patient care .
- Administrative responsibilities include carrying out the hospital's guidelines and directives regulating the release of support services in the areas of finance, staff, housekeeping , materials and property ,laundry , protection , transportation, engineering, and board as well as several other maintainance.
- The hospital's financial activities must be planned , guided, and co-ordinated, for
- Patients in a hospital as well as the employees working there.
- Prepare a job and financial plan for services and initiatives as well as funding projections.

- To keep track of cash receipts and disbursements.
- To manage personnel development plans, procedures, and standards to provide guidance on policy, implementation,and administrations of laws, rules and regulatins.
- The quality , efficacy and outcomes of health services for various groups and populations are shaped by the structure and dynamics of healhcare organizations; the policy ripercussions for future health care reform initiatives and patients in thehospital.
- Hospital operation is another benefit of hospital's.

TYPES OF BEDS IN HOSPITALS WTH NAME

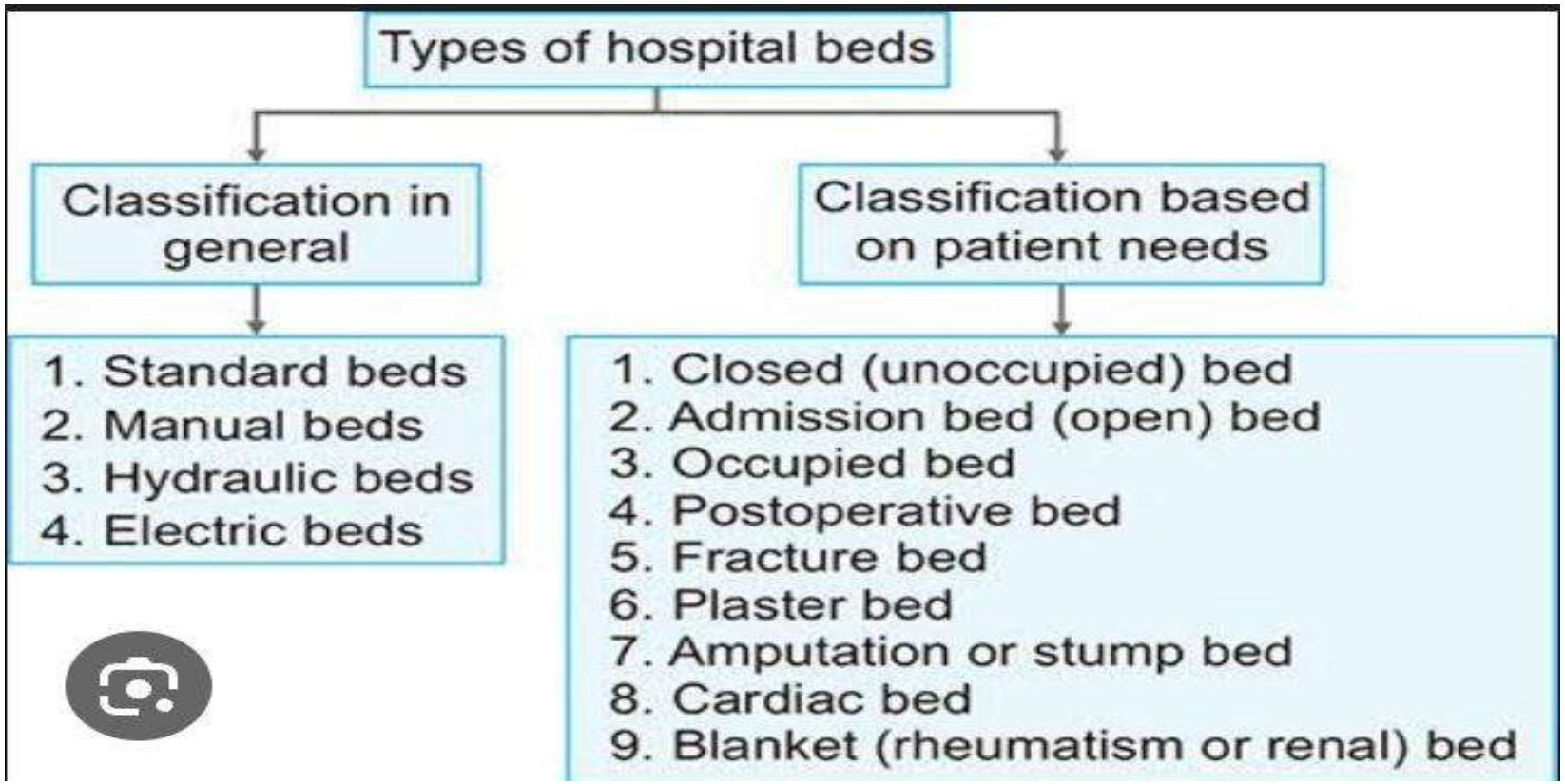


Fig no:- 1.2 Types Of Hospital Beds

Making a bed is a skill. It is method of preparing a suitable bed based on the patient's condition and using scientific nursing concepts. The patient would feel more comfortable if the bed is made with care. Nurses must be able to prepare hospital beds in a variety of ways depending on the situation. In most cases, beds are made after a client requires specific treatment and when there are no other people in the room.

Simple beds:-

- Closed bed
- Open bed
- Occupied bed

Special beds:-

- Operation bed
- Cardiac bed
- Blanket bed
- Amputation bed
- Fracture bed

TYPES OF HOSPITALS

Hospitals are subsidized by the government for – profit or non-profit health agencies, health insurance providers , charities , such as direct charitable donations. Depending on the funding , hospitals can be classified into one of three groups.

Below mentioned are the types of the hospital:

- Publicly owned hospital
- Non-profit hospitals
- For- profit hospitals

Hospitals may be further graded depending on the type of care they provide (indicative) or the services they provide, such as:

- Speciality hospitals
- General medical and surgical hospitals
- Teaching hospitals
- Psychatric hospitals
- Dental laboratories.

FUNDINGS OF THE HOSPITALS

- Support for modern hospitals comes from several places. They maybe paid for by public funds, charitable contributions, or private funds and health insurance . The national health service in the united kingdom provides state –funded health services to legal citizens “completely free of delivery” as well as emergency care to everyone , regardless of nationality or status.
- Due to the requirement for hospitals to prioritize their available resources, there is a propensity for ‘waiting lists’ for non-essentials treatment in countries with such program then those who can access it can opt for private medical insurance to receive treatment quite rapidly and efficiently .
- Hospitals and clinics in the united states are generally privately owned and operated, with certain for- profit hospitals including HCA healthcare . A chargemaster is used to charge a database of procedures and their costs; nevertheless , these prices could be lower for healthcare services provided across healthcare networks .
- Hospitals are required by law to treat patients in life – threatening emergencies regardless of their financial capacity to pay .

to pay . Privately operated hospitals that accept people without insurance in emergency cases , including the aftermath of hurricane katrina , suffer significant revenue damage.

INTRODUCTION TO PHARMACY

The term pharmacy has been derived from the greek word pharmakria which means “use of drugs”. Pharmacy is the branch of pharmacology which deals with collection, prepration, standardization , compounding and dispensing of drugs in such a way so as to make the medication suitable for easy , effective and palatable administration in the treatment of disease.

fig no;- 2.1 old pha

Clinical pharmacy is the science of drug formulations , their stability, shelf line , handling and also education of the patient about compliance and counsellig him on how to take the medication, and monitoring for errors in drug therapy.

Pharmacognosy

It is the study of sources and identification of drugs from plant sources.

BIOPHARMACEUTICS

It deals with the development of new dosage forms and new drug delivery system with a view to produce desired pharmacokintics and pharmacodynamic characterstic of a drug.

MEDICINAL CHEMISTRY

It deals with designing and synthesis of a new drug based on the structure –activity relationship of the existing drug of a generic group.

PHARMACEUTICS

It is a technological science which deals with the manufacturing of drug . Pharmaceutical prepration is the form of drug prepared for dispensing to the patiens.

DRUG

Drug is any substance or product that is used or intended to be used to modify or explore physiological systems or pathological states for the benefit of the recipient.

Dosage forms

they are convenient forms of natural or synthetic drugs for adiministration into the body of the patient.

Drug Nomenclature

Chemical name: describes the substance chemically.

Too long and complicated for routine use.

Non- proprietary : it is a short name given to a drug that is not subject to proprietary rights.

The nonproprieatary name should always be concise and meaningful.

There are two classes of non proprietary names.

1. Approved Name
2. Official Names.

APPROVED NAME :

This name is given to drug by bodies like United States Adopted Name Council (USAN) and British Approved Name (BAN) soon after its introduction., this name sometime reffered to as generic name.

they designate a chemical or pharmacological class of drugs such as penicillin.

OFFICIAL NAMES :

It is the name approved by the national pharmacopeia commision and included in the official book i.e. pharmacopeia. The official name must be identical with approved name.

proprietary name: the name assigned by the trade mark. One drug may have multiple proprietary names.

EXAMPLE:

DRUG:-paracetamol

CHEMICAl NAME : N-(4-hydroxyphenyl) acetamide

NON- PROPRIETARY:

APPROVED NAME:

British approved name (BAN): paracetamol ,

United states adopted name (USAN): acetaminophen

OFFICIAL NAME:

Acetaminophen

PROPRIETARY NAME:

Crocin, Calpol, Metacin.

DRUG COMPEDIA

These are compilation of information on drugs in the form of monographs , without going into the theoretical concepts , mechanisms of action and other aspects which help in understanding the subject. Pharmacopieas and formularies are called official compedia.

PHARMACOPIEAS

They are official codes which deals with description of standard of their physical, and chemical properties and test for their identity, purity and potency.

E.g. Indian pharmacopoeia.

DIFFERENT DEPARTMENT OF HOSPITALS

There are different inerpretations when talking about the departments in a hospital setting. Whether you are visiting the hospital to undergo a mandatory operation or a cosmetic surgery like rhinoplasty, some view hospital departments as the inpatient or outpatient wards, while some think that departments mean each unit within the medical setting. Let us discuss both divisions in a more simplified way.

INPATIENT WARDS

Emergency ward: This is an integral part of a hospital that caters to life-or-death situations that need immediate medical attention. This department may be divided into sub-units for trauma , burn , trauma surgery, and urgent care.

Cardiology: This ward caters to patients diagnosed with heart problems that need constant monitoring and observation due to fluctuations and abnormalities in the blood circulation and cardiac function

.

Neurology, oncology, OB departments: These are specialized wards that deal with admitted patients suffering from neurological problems, cancer or pregnancy and reproductive complications, respectively.

Other hospital departments

Nursing administration: This is one of the departments in a hospital that is somehow overlooked by patients, mainly because its function is not necessarily for their welfare . This is the office of all the nursing directors of managers in each department of the hospital.

Outpatient Departments: These comprise of different outpatient clinics and treatment units for behavioral health, dental services, dermatology (skin disease) , physical therapy , internal medicine, rehabilitive medicine, and psychiatry\psychology.

Pharmacy: All medicines prescribed to be taken in or out of the hospital can be purchased in this department. Licensed pharmacists manage the distribution dispensing use and supply of medications within the entire hospital

Radiology: This is where Imaging tests are performed . X-ray ,CT scan , MRI , ultrasound are just performed in this department.

Pathology\ Laboratory: This is also a department that handle diagnostics tests that deal with the secretions and body fluids of a

Patient to determine diagnosis or a disease etiology. Blood tests, urine exam , stool exam, sputum test, biopsy, and other medical laboratoreies that are needed to confirm disease or presence of the bacteria in the body.

Medical records: This is where patients can get a medical summary of their hospital admission for legal and occupational purposes. Documentation's of a patient's stay, the lab test results, and the doctor's charting can be obtain through only a valid request.

we hope that we shed some light on your curiosity to know the different departmentsi n a hospital to help you understand their different responsibilities and roles in maintaining your overall well-being.

DRUG DISPENSING AND STORE MANAGEMENT

DRUG STORE :- A drug store \pharmacy\ chemist's is a retail shop which provides prescription drugs , among other products. At the drug store , a pharmacist oversees the fulfilment of medical prescriptions and is available to give advice on their offerings of over the counter drugs. A typical pharmacy would be in the commercial area of a community. Every hospital should have a medical store for the purpose of procuring, stocking and distributing the drugs and medicines to various departments.

Store are defined as a sub organization in any hospitals where materials obtained are held in abeyance till inspected, approved and stocked . A store should have a standard specification of materials and since the store procured the drugs on behalf of the department for regular flow of material , the condition of storage should be proper.

OBJECTIVES OF DRUG STORES

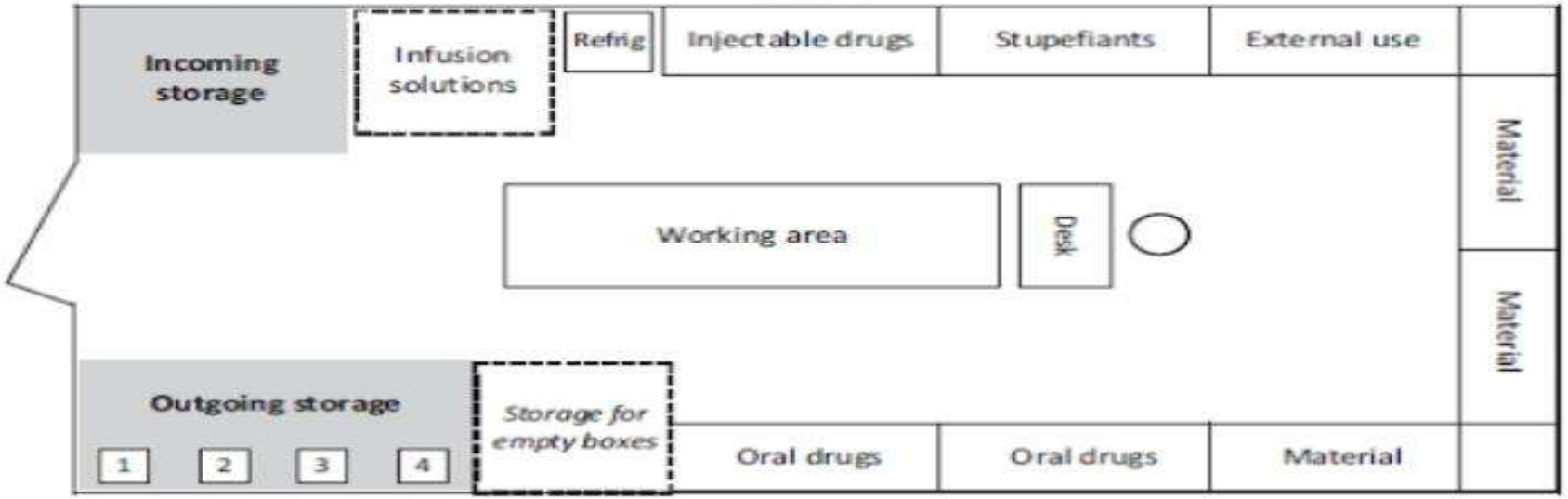
- To stock all drugs and accessories required in the hospital.
- To procure drugs from different sources.
- To supply drugs to the consuming departments.
- To store drugs required in research work .
- To preserve records of receipt and issue of drugs.
- To carry out all operations regarding drugs economically to save revenue.

TYPES OF MATERIAL STOCKED

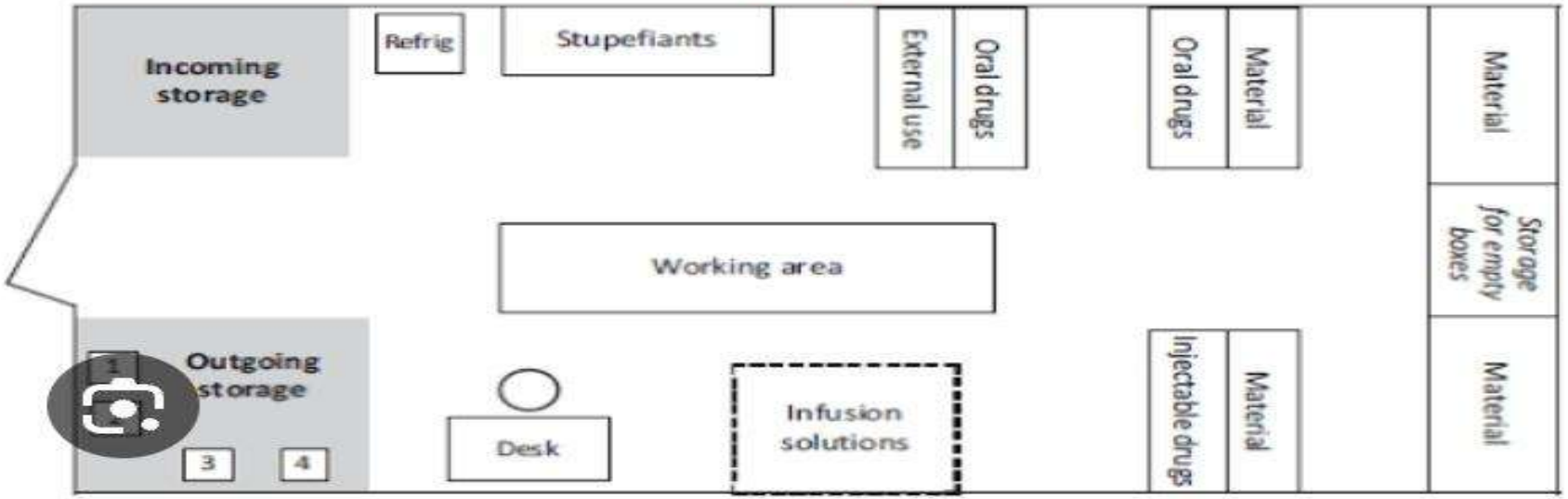
I. Capsules, tablets, liquid dosage form and injections, etc.
II. Biological antibiotics are stored properly in refrigerator
III. Narcotic and psychotropic drugs are stored under lock and key
IV. Poisons are stored in seprate closed rack, labelled as "poison"
V. Alcohol and alcohol containng preprations.
VI. Large bulk items on bottom
VII. Vaccines and other thermoliable drugs are required to be stored at cold store 2-10c antibiotics vitamins liver preparation etc should be stored at cool temp(15-20c)
VIII. To avoid plifrage costly drugs and prescribed schedule X drugs should be stored separately.

LAYOUT OF DRUG STORE

Schema 1



Schema 2



DIFFERENT ROUTES OF INJECTION

An injection is a way administering a liquid to a person using a needle and syringe . It's also sometimes called a 'shot' or 'jab'.
Injections are used to give a wide variety of different medications , such as insulin, vaccines and botox , but not all injections are the same.

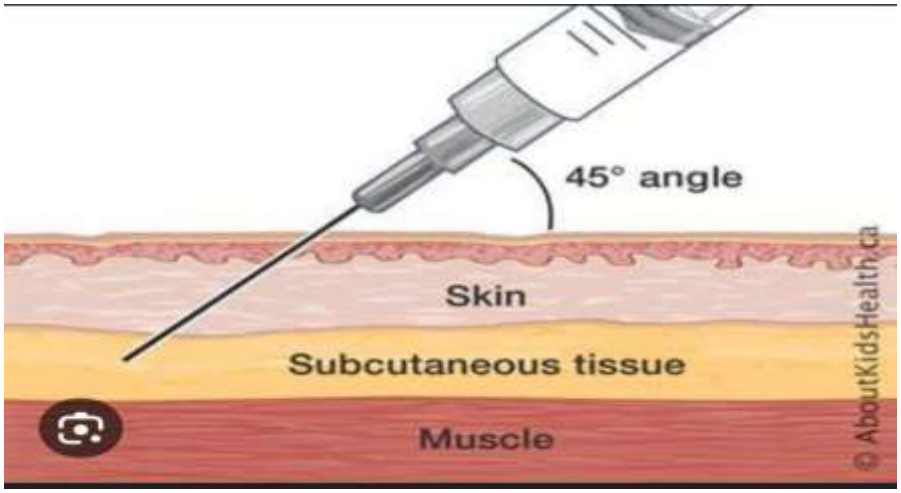
Different routes usually refers to the body tissue orpath by which a medication is injected describes its route of administration.

The four most frequently used types of injection are:

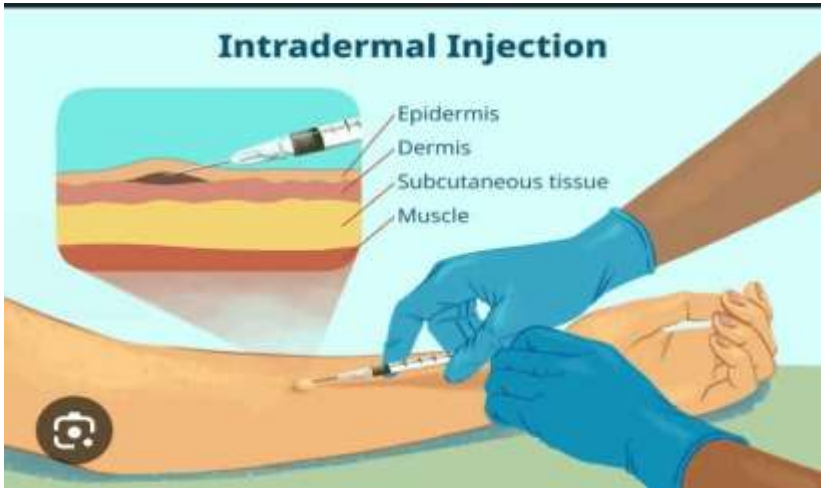
1. **INTRAVENOUS (IV) INJECTIONS-** An iv injection is the fastest way to inject a medication and involoves using a syringe to inject a medication directly into a vein . When people talk about receiving medications via, iv , however they are usually talking about an iv infusion or drip, which involves using a pump or gravity to infuse the medicatiobns into a vein , rather than a syringe . Iv infusions allow a set amount of medications into a vein , rather than a syringe . Iv infusions allow a set amount of medication to be administered in a controlled manner over a period of time

2. **INTRAMUSCULAR (IM) INJECTIONS-** Injections are given into deep muscles where the medication is then absorbed quickly by surrounding vessels.

3. **SUBCUTANEOUS (SC) INJECTIONS:** SC injections are injected into the innermost layer of the skin called the subcutis or hypodermis, which is made up of a network of fat collagen cells. SC injections are also known as 'subcut' or 'SQ' injections. These injections work more slowly than an iv or im injections because the area does not have such a rich blood supply.



4. **INTRADERMAL (ID) INJECTIONS :** ID injections are given directly lt into the middle layer of the skin called dermis. This type of injections is absorbed or more slowly again than IV, IM or SC injections.



some medications can be injected in more than one way, epinephrine is used to treat severe allergic reactions can be given via IM or SC INJECTION. , FOR EXAMPLE Epogen on the other hand, which is used to treat anmia, can be given by IV or SC injection.

other type of injections include:-

- Intra- articular injections - into a joint
- Peri-articular injections- into the soft
- Intraosseous injections- into the bone marrow
- Intradetrusor injections – into the muscle in the wall of bladder
- Intraocular – into the jelly like fluid into the eye
- Intraperitoneal injections- given within the abdominal cavity
- Intracardiac injections – into the muscles of ventricles of the heart
- Intracavernous injections – into the base of penis

FIRST AID

First aid is an emergency measure, generally consisting of simple , often life- saving techniques that most people can train to perform with minimal equipment and no previous medical experience.

The term usually refers to administering care to a human, although it can also be performed on animals.

It is not classed as medical treatment and does not replace interventions from a trained medical professionals.

first aid is a combination of simple procedures and common sense.

AIMS OF FIRST AID

The aims of first aid are :

- **TO PRESERVE LIFE:** Saving lives is the main aim of first aid.
- **TO PREVENT FURTHER HARM :** The person who has experienced the injury must be kept stable, and their condition must not deteriorate before medical services arrive. This may include moving the individual away from harm, applying first aid techniques, keeping them warm and dry, and applying pressure to wounds to stopany bleeding.
- **PROMOTE RECOVERY:** Taking steps to promote recovery may include applying a bandage to a wound.

HOW TO PRACTICE FIRST AID

The most common term referred to in first aid is ABC . This stands for airway , breathing, and circulation. A fourth step will appear in the emergency procedures for some facilities.

- **AIRWAY:-** Make sure the airway is clear . Choking, which results from the obstruction ofairways, can be fatal.
- **BREATHING:-** Once the airways are confirmed to be clear, determine whether the person can breathe, and if necessary, provide rescue breathing.
- **CIRCULATION**:- If the person involved in the emergency situation is not breathing the first aider should go straight for chest compression and rescue breathing. The chest compressions will promote circulation. This saves valuable time in emergencies that are not life- threatning, the first aid needs to check the pulse.
- **DEADLY BLEEDING OR DEFIBRILLATION :-**Some organizations consider dressing severe wounds or applying defrillation to the heart a seprate fourth stage, while others include this as part of the circulation step.

Evaluating and maintaining ABC with a patient depends on the traioning and experience of a first aider,. As soon as ABC has een secured, the first aider can then focus on any additional treatments.

Surgical instruments

COMMON SURGICAL INSTRUMENTS

The operating room contains a multitude of instruments fit for accomplishing a number of procedures. Note that this is not an exhaustive list of instruments, but rather some that you will encounter frequently.

SCALPEL

Used for initial incision and cutting tissue. Consists of a blade and a handle. Surgeons often refer to the instrument by its blade number.

#10 Blade: Used primarily for making large skin incisions, e.g., in laparotomy.

#11 Blade: Used for making precise or sharply angled incisions.

#15 Blade: Smaller version of #10 blade used for making finer incisions.

SCISSORS

Used for cutting tissue, suture, or for dissection. Scissors can be straight or curved, and may be used for cutting heavy or finer structures.

Mayo Scissors: Heavy scissors available in multiple varieties. Straight scissors are used for cutting suture ("suture scissors"), while curved scissors are used for cutting heavy tissue (e.g., fascia).

Metzenbaum Scissors: Lighter scissors used for cutting delicate tissue (e.g., heart) and for blunt dissection. Also called "Metz" in practice.

Pott's Scissors: Fine scissors used for creating incisions in blood vessels.

Iris Scissors: Used for fine dissection and cutting fine suture. Originally for ophthalmic procedures, but now serves multipurpose role.

FORCEPS

Also known as non-locking forceps, grasping forceps, thumb forceps, or pick-ups. Used for grasping tissue or objects. Can be toothed (serrated) or non-toothed at the tip.

Tissue Forceps: Non-toothed forceps used for fine handling of tissue and traction during dissection.

Adson Forceps: Forceps toothed at the tip used for handling dense tissue, such as in skin closures.

Bonney Forceps: Heavy forceps used for holding thick tissue (e.g., fascial closure).

DeBakey Forceps: Used for atraumatic tissue grasping during dissection.

Russian Forceps: Used for atraumatic tissue grasping during dissection.

CLAMPS

Also called locking forceps, these are ratcheted instruments used to hold tissue or objects, or provide hemostasis. Can be traumatic or atraumatic.

Crile Hemostat: aka "snap," atraumatic and non-toothed clamp used to grasp tissue or vessels that will be tied off. Also used in blunt dissection.

Kelly Clamp: Larger size variation of hemostat with similar function for grasping larger tissues or vessels.

Kocher Clamp: Traumatic toothed clamp used to hold tissue that will be removed.

Allis and Babcock Clamps: Slightly rounded jaws, both are used for grasping intestine.

STAPLERS AND CLIPS

Used for reanastomosis of viscera, vessel ligation, and excision of specimens. Can be one-time use, reloadable, manual, or electronically powered. Staples come in multiple sizes.

Linear Stapler: Creates a linear staple line; no cutting function. Used in ligation and anastomosis. May be curved.

Linear Cutter: Creates a linear cut and immediately staples both free edges. Used in separation and anastomosis.

Circular Cutter: Performs circular cut and staple. Used in reanastomosis of hollow viscera, e.g., large bowel.

Clips: Used in the ligation of vessels, may be metal or absorbable material. Open and lap applicators.

ENERGY SYSTEMS

Broad term used to describe various methods of cutting tissue or sealing vessels. May use electricity or sonic waves. Available in open or laparoscopic forms.

Electrosurgery: Instrument that cuts or cauterizes tissue via an alternating electrical current. Open (shown) and laparoscopic (Ligasure®) applications.

Ultrasonic: (Harmonic®) uses high-frequency sound to concurrently cut and seal tissue. Less thermal spread than electrosurgery, but more time consuming.

Endostapler: Used in laparoscopic procedures, provides simultaneous cutting and stapling. May be manual or electronic. Some feature articulating heads to accomplish more difficult placement.

LAPAROSCOPIC INSTRUMENTS

Many instruments are similar to those used in open surgery, adapted to fit through narrow ports placed through the skin. Laparoscopic work is then conducted via the ports.

Camera: The camera is the hand-held component and connects to a variety of lenses. There are usually settings for focus and white balance.

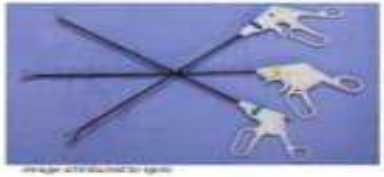
Lens: Available in multiple viewing angles to achieve better visualization of anatomical structures. May require occasional defogging.

Light Source: Fiber optic cable connects to lens and illuminates field of vision. Caution around internal structures as light output can be hot.

Insufflator: Injects carbon dioxide into the abdominal cavity to create a working space for trocar placement and surgical procedures.

Veress Needle: One method of achieving pneumoperitoneum. Consists of blind placement of needle into abdomen and subsequent injection of gas.

Trocars: Transabdominal working ports where laparoscopic instruments are inserted. Also for insufflation or removal of specimens. Available in multiple sizes, e.g., 5, 10, and 12 mm.



Laparoscopic Instruments: Hand-held and shafted implements used to work through trocars. Can perform grasping, retracting, cutting, cauterizing, and other functions.

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Many instruments are similar to those used in open surgery, adapted to fit through narrow ports placed through the skin. Laparoscopic work is then conducted via the ports.

Camera: The camera is the hand-held component and connects to a variety of lenses. There are usually settings for focus and white balance.

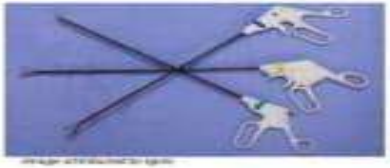
Lens: Available in multiple viewing angles to achieve better visualization of anatomical structures. May require occasional defogging.

Light Source: Fiber optic cable connects to lens and illuminates field of vision. Caution around internal structures as light output can be hot.

Insufflator: Injects carbon dioxide into the abdominal cavity to create a working space for trocar placement and surgical procedures.

Veress Needle: One method of achieving pneumoperitoneum. Consists of blind placement of needle into abdomen and subsequent injection of gas.

Trocars: Transabdominal working ports where laparoscopic instruments are inserted. Also for insufflation or removal of specimens. Available in multiple sizes, e.g., 5, 10, and 12 mm.



Laparoscopic Instruments: Hand-held and shafted implements used to work through trocars. Can perform grasping, retracting, cutting, cauterizing, and other functions.

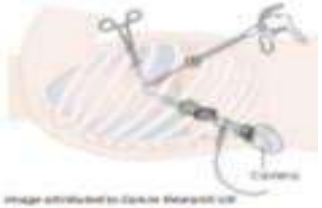
Most surgical subspecialties have specialized equipment specific to the procedures they commonly perform. This guide provides a brief overview of some of that equipment for familiarity.

CARDIO-THORACIC SURGERY

Cardiopulmonary bypass, bronchoscopy, and equipment for minimally invasive thoracic procedures are frequently encountered.

Cardiopulmonary Bypass: Pump circuit that diverts blood away from heart, oxygenates blood, and removes wastes, with a separate circuit for cardioplegic solution. Operated by a cardiac perfusionist. Adequate anticoagulation required for proper function.

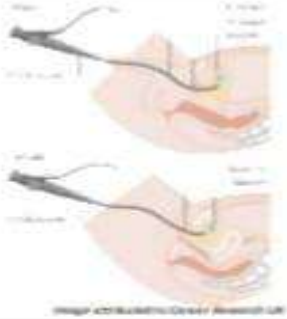
Bronchoscope: Endoscope narrow enough to view, aspirate, or remove specimens from airway and branches



Video-Assisted Thoracoscopic Surgery (VATS): Minimally invasive surgical technique for procedures in the thorax.

UROLOGIC SURGERY

Minimally invasive cystoscopic equipment is frequently used for both visualization and performing procedures.



Cystoscope: Endoscope, either flexible or rigid, that is used for visualization of the genitourinary system for either diagnosis or procedures. Combined with saline circulation to create viewing space in bladder.

Ureteral Stent: Semirigid tube that is used to maintain patency of ureter. May be used as temporary measure for obstruction or placed prior to abdominal surgery to identify ureters. Usually placed with cystoscopy.

ORTHOPAEDIC SURGERY

Joint replacements and other procedures require specialized equipment.

Arthroscope: Endoscopic technique to diagnose and treat joint, ligament, and tendon disorders. Combined with saline circulation to create joint space.

Orthopaedic Implants: Synthetic pins, nails, or other prostheses used to fix broken bones or replace worn joints. Usually implanted using special surgical equipment.

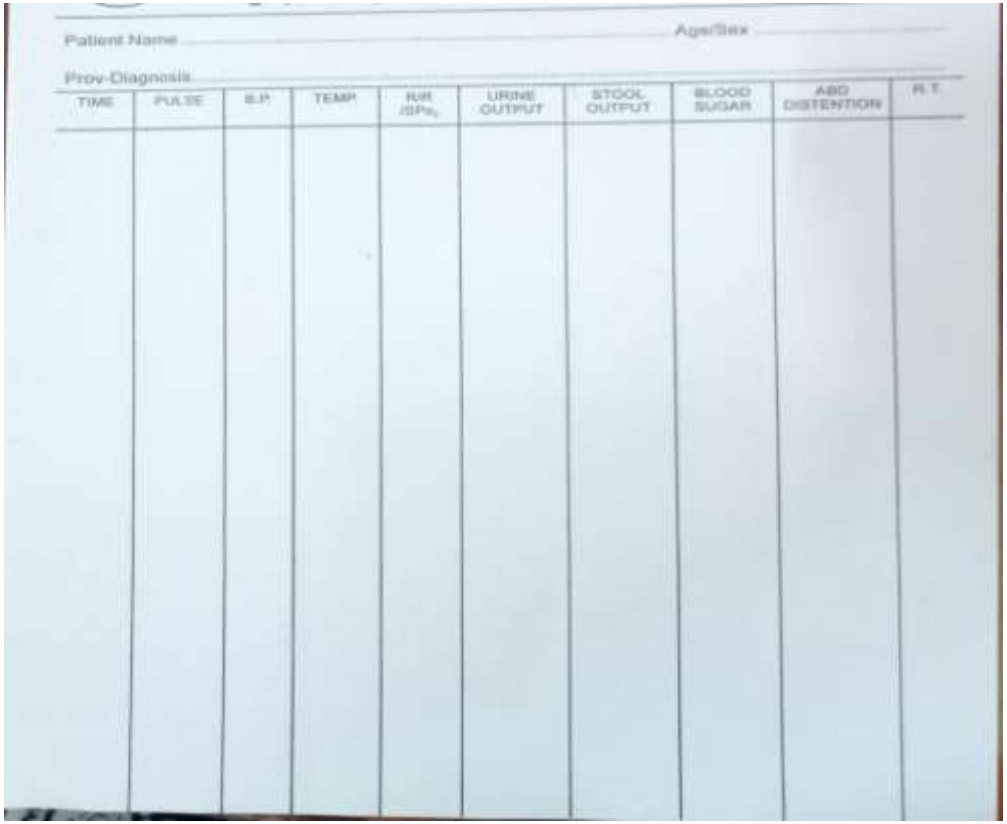
Rongeur: Sharp-edged and sturdy instrument used for removing bone or creating a window in bone.

Bone Saw: Battery powered and used for cutting bone, either free hand or with the assistance of a jig.

PATIENT OBSERVATION CHART

Observation chart is used by clinical teams to record a patient physiological parameters respiratory rate, oxygen saturation levels blood pressure temprature ,pulse rate , and level of consciousness. Early warning scores are derived from these parameters and are used to alert members of the team deterioration in a patient's condition and indicate the most appropriate escalation of care.

Early warning score tools are found on the observation chart of the patient's bedside, and this chart must be up to date and complete to facilitate timely escalation of a deteriotating or acutely ill patient . The national institute for health and care excellence recommends that all adult patients in acute hospital settings in the united kingdom should have their physiological observations recorded every 12 hours, unless a decision has been made at a snior level to increase or decrease the facility.



PRESCRIPTION PAD

A prescription is a written order from a registered medical practitioner to pharmacist to compounding and dispenses a specific modification for the patient.

The prescription are generally written in the englishlanguage but latin words or abbreviations are frequently used in order to save time.

PARTS OF PRESCRIPTION

- DATE
- NAME,AGE, SEX, AND ADDRESS OF THE PATIENT
- SUPERSCRIPTION
- INSCRIPTION
- SUBSCRIPTION
- SIGNA OR SIGNATURE
- RENEWAL INSTRUCTION
- SIGNATURE, ADDRESS AND REGISTRATION NUMBER OF THE PRESCRIBER

1. **DATE:-** It helps a pharmacist to find out the date of prescribing to find out the date of prescibing and date of prescription for fiiling the prescription.
2. **NAME, AGE, SEX AND ADDRESS OF THE PATIENT:-** Must be written in the prescription because it serves to identify the prescription.

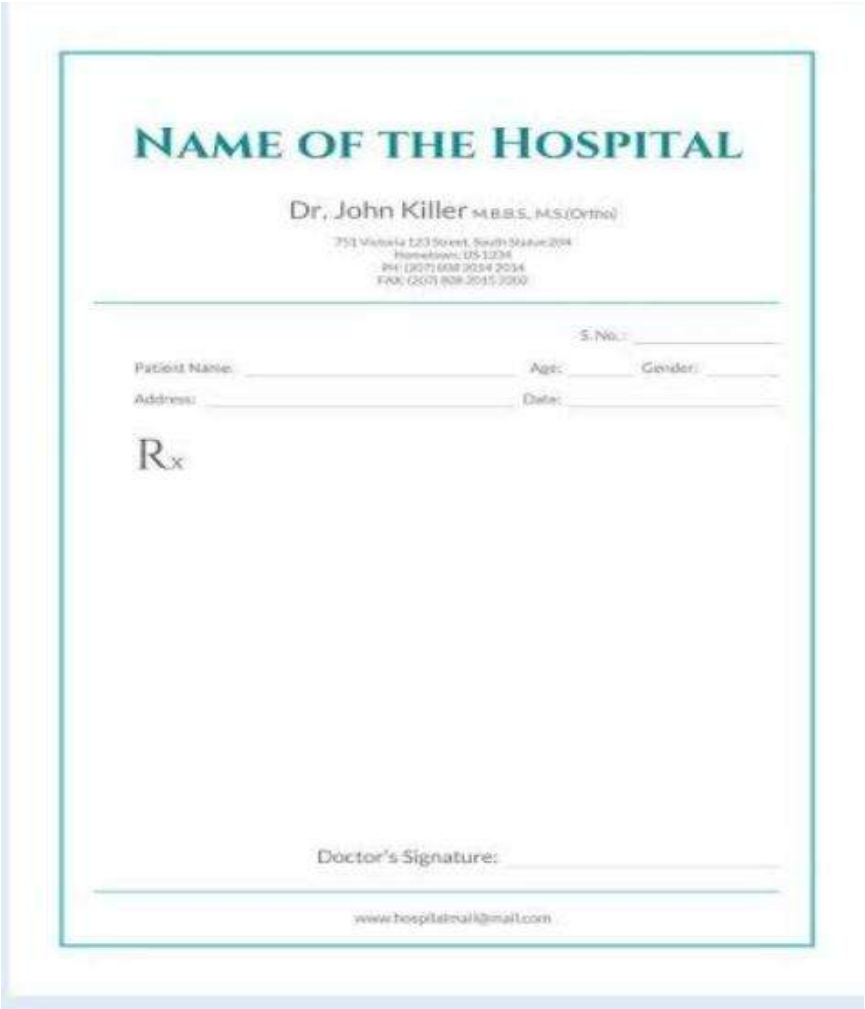
_In case, if any of this information is missing in the prescription , the same may be included by the pharmacistafter proper enquiry from the patient.

_also used in dose calculation of the children.

3. SUPERSCRIPTION:- It is represented by symbol Rx symbol. It is Latin word it means you take.

4. INSCRIPTION :- This is the main part of the prescription ,order, contains the names and quantities of the prescribed ingredients.

5. **SUBSCRIPTION:-** This comprises direction to the pharmacist for preparing the prescription and number of doses to be dispensed.
6. **SIGNATURE OR SIGNA :-** This consist of thr direction to be given to the patient regarding the administration of drug.
7. **RENEWAL INSTRUCTIONS:-**The prescriber indicate on every prescription, order whether it may be renewed and if so , how, many tmes.
8. **SIGNATURE, ADDRESS,AND REGISTRATION NUMBER OF THE PRESCRIBER:-** The prescription must must bear the signature of the prescriber along with its registration number and address.



CONCLUSION

Conclusion , the hospital training program has been a crucial component in enhancing the skills, knowledge, and overall competency of the healthcare workforce . Throughout this report, we have discussed various aspects of the training program, including its objectives , content, delivery methods, and outcomes.

The training program has successfully addressed the identified learning needs and contributed significantly to the professional development of the participants . It has not only improved clinical skills but has also fostered a culture of continous learning and quality improvement within the hospital . Moreover, the program has played a pivotal role in ensuring compliance with industry standards and regulations.

While the hospital training program has been effective, there is always room for improvement. It is recommended that ongoing assessment and feedback mechanisms be implemented to tailor the training to evolving healthcare trends and individual learner needs . Additionally , exploring opportunities for the integration of technology and simulation based training can further enhance the program's effectiveness .

Overall , the hospital training program serves as a model for promoting excellence in healthcare delivery. It empowers healthcare professionals to provide high-quality patient care and adapt to the ever – changing healthcare landscape . As we move forward , it is imperative to continue investing in training and development to ensure that our healthcare workforce remains well-prepared and committed to delivering the best possible care to our patients".

Remember to customize this conclusion to the specific details and findings of our hospital training report.