ANESTHESIOLOGY

Objectives:

At the end of the course, the learners shall be able to:

- 1. Have familiarity with different types of anaesthesia, drugs, indications, administration, side effects & contraindications.
- 2. To perform Cardiopulmonary resuscitation (Adult and pediatric)
- 3. Set up I.V infusion and Peripheral cannulation (Adult and pediatric)
- 4. Airway Management in the unconscious patient
- 5. To perform endotracheal intubation(Adult and pediatric)
- 6. Administer O2 in the hospital and domestic setup
- 7. To perform simple nerve blocks

Knowledge

| Subject | Must know | Desirable to know |
|--|--------------|----------------------|
| Anatomy of upper airway - Normal & Abnormal (Endotracheal Intubation) | ✓ | |
| Physiology of Respiration - O2 & CO2 transport (Oxygen therapy) | ✓ | |
| Premedication | | |
| Pre-operative evaluation | ✓ | |
| Muscle relaxants | | ✓ |
| Stages of Anesthesia and general anesthetic agents | | ✓ |
| Administration of GA, Balanced anesthesia and IPPV | | ✓ |
| Regional anesthetics: Infiltration, Digital, Ankle block, Peripheral nerve block | ✓ | |
| Spinal Anesthesia and Epidural Anesthesia | | ✓ |
| Monitoring the post operative patient | ✓ | |
| Post operative complications and recovery room | ✓ | |
| CPCR and use of simple ventilators | | ✓ |
| ICU, Role of Anesthesia | | ✓ |
| Shock | ✓ | |
| Blood transfusion, fluid and electrolyte balance (basics) | ✓ | |
| Management of unconscious patient including airway | ✓ | |
| Basic principles of management of poisoning | ✓ | |
| Acute pain relief | ✓ | |
| Chronic pain relief & palliative care principles | ✓ | |
| Patient as a person | ✓ | |
| Autonomy of decision - Do not resuscitate + Organ harvesting | ✓ | |
| Prolongation of life | ✓ | |
| Euthanasia | ✓ | |
| Cancer & terminal care | ✓ | |
| Consent for surgery & anesthesia | ✓ | |

Examination skills

| Skills | Perform independently | Perform under supervision | Assist the expert | Observe |
|--|--------------------------|---------------------------------|-------------------------|---------|
| Head and neck positioning | ✓ | | | |
| Bag-and-mask using self-inflating bag | ✓ | | | |
| Selection & use of oxygen delivery devices | ✓ | | | |
| Recognition & management of respiratory obstruction | ✓ | | | |
| Insertion of oral airway | ✓ | | | |
| Insertion of nasopharyngeal airway | | ✓ | | |
| Suctioning | ✓ | | | |
| Use of laryngoscope | ✓ | | | |
| Use of orotracheal tube | ✓ | | | |
| ETT Suctioning | ✓ | | | |
| Peripheral venous cannulation | ✓ | | | |
| Local anaesthetic infiltration (for cannulation) | ✓ | | | |
| Setting up an intravenous infusion | ✓ | | | |
| Preparing & giving intravenous medicines | | ✓ | | |
| Recognize common complication | | ✓ | | |
| Use of defibrillator | | | ✓ | |
| Surface anesthesia | ✓ | | | |
| Digital block | ✓ | | | |
| Infiltration Anesthesia | ✓ | | | |
| Interpretation of ABG, CVP, Pulse oximeterand Capnograph | | ✓ | | |
| Consent for procedures | ✓ | | | |
| Motivation for blood and organ donation | | | ✓ | |
| Interpersonal relationship | ✓ | | | |
| History taking & Preanesthetic evaluation | | | ✓ | |
| Documentation and maintenance of records | ✓ | | | |
| Medical Team/Mass Casualty Management | | | ✓ | |
| Hemorrhage & Shock | | | ✓ | |
| Anaphylaxis | | | ✓ | |
| Status asthmatics | | | ✓ | |
| First aid | ✓ | | | |