# RYK MEDICAL COLLEGE Outcomes of MBBS Course

Following competencies about Patient assessment, Patient care, Medical skills, Drug Prescribing and Therapeutic procedures are expected in a Doctor after completing MBBS Course.

An MBBS Doctor should be able to:

### A. <u>PATIENT ASSESSMENT</u>

- 1. Take baseline physiological observation and record appropriately (all wards)
  - Measure temperature, respiratory rate, pulse rate, blood pressure, oxygen saturations, NG output and urine output.
- 2. Carry out general and systemic examination abdominal, chest, nervous system, CVS, vascular, breast lump, neck and thyroid (all wards)
  - Systemic approach in clinical examination Complete All steps of examination and document appropriately
- 3. Do Ophthalmoscopy- Eye ward rotation
  - Perform basic ophthalmoscopy and identify common abnormalities
- 4. Do Otoscopy- ENT Ward
  - Perform basic otoscopy and identify common abnormalities
- 5. Do Obstetric & Gynaecological wards
  - Perform Obstetric & Gynaecological examination
- 6. Take informed consent
- 7. Do Preoperative counseling

# B. PATIENT CARE

- 8. Perform surgical scrubbing up
  - Follow approved processes for cleaning hands and wearing appropriate personal protective equipment before
- 9. Set up an infusion
  - Procedures or surgical operations set up run through and intravenous infusion. Have awareness of the different
- 10. Use correct techniques for moving and handling of patients, including patients who are frail
  - Equipment and devices used. Use, and/ or direct other team members to use, approved methods for moving, lifting and handling people or objects, in the context of clinical care, using methods that avoid injury to patients,
- 11. Guide for Positioning for breast feeding
  - colleagues, or oneself Should be able to direct patient on positioning of breast feeding
- 12. To Perform CTG and its interpretation

# C. PROCEDURAL SKILLS

- 13. Do Blood sampling
  - For the growth of infectious organisms in proper culture bottles
- 14. Carry out arterial blood gas and acid base sampling from the radical artery in adults

- Insert a needle into a patient's radial artery (in the wrist) to take a sample of arterial blood and interpret the results. Use appropriate measures to prevent Hematoma formation at the site
- 15. Carry out venipuncture
  - Insert a needle into a patient's vein to take a sample of blood for testing. Make sure that blood samples are taken in the correct order, placed in the correct containers, that these are labeled correctly and sent to the laboratory promptly
- 16. Measure capillary blood glucose
  - Measure the concentration of glucose in the patient's blood at the bedside using appropriate equipment. Record and interpret the results.
- 17. Carry out a urine multi dipstick test
  - Explain to patient how to collect a midstream urine sample. Test a sample of urine to detect abnormalities. Perform a pregnancy test where appropriate.
- 18. Carry out a 3- and 12- lead electrocardiogram
  - Set up a continuous recording of the electrical activity of the heart, ensuring that all leads are correctly placed.
- 19. Take and/or instruct patients how to take a swab
  - Use the correct technique to apply sterile swabs to the nose, throat, skin and wounds. Make sure that samples are placed in the correct containers, that they are labeled correctly and sent to the laboratory promptly and in the correct way
- 20. Carry out Urinary Bladder Catheterization
  - Insertion of a catheter tube through the urethra and into the bladder to drain urine.
- 21. Do Nebulization
  - Follow the directions for the specific brand of nebulizer machine and cup
- 22. Carry out removal of surgical drains
  - Firmly grasp drainage tube close to skin with dominant hand, and with a swift and steady motion withdraw the drain and place it on the waterproof drape/pad (other hand should stabilize skin with 4 X 4 sterile gauze around drain site).
- 23. Do Removal of sutures
  - Remove sutures by following aseptic techniques
- 24. Do Application of POP
  - Apply the POP on top of the cotton wool padding from distal to proximal, without applying tension to the roll, overlapping each layer by 50%.
- 25. Take HVS
  - To test vaginal discharge for the presence of vaginal thrush, bacterial

#### D. PRESCRIBING

26. Instruct patients in the use of devices for inhaled medication

- Explain to a patient how to use an inhaler correctly, including spacers, and check that their technique is Correct. Should know about various types of Inhalers
- 27. Prescribe and administer oxygen
  - Prescribe and administer oxygen safely using a delivery method appropriate for the patient's needs and monitor and adjust oxygen as needed. Knows the exact volume given per Minute
- 28. Prepare and administer inject able (intramuscular, subcutaneous, intravenous) drugs,

- Prepare and administer inject able drugs and prefilled syringes Knows about various channels of CVP
- 29. Do Interpretation of X-rays of upper and lower limbs
  - should be able to identify gross musculoskeletal pathology on X-rays
- 30. Do interpretation of x-rays of chest, abdomen and pelvis
  - should be able to identify rib fractures, hemothorax, pneumothorax, free air under diaphragm, pelvic fractures

#### E. THERAPEUTIC PROCEDURES

- 31. Carry out intravenous cannulation
  - Insert a cannula into a patient's vein and apply an appropriate dressing.
- 32. Carry out safe and appropriate blood transfusion
  - Following the correct procedures, give a transfusion of blood (including correct identification of groups). Observe the patient for possible reactions do the transfusion, and take action if they occur.
- 33. Carry out male and female urinary catheterization
  - Insert a urethral catheter in both male and female patients. Should know its complications and Management
- 34. Carry out wound care and basic wound closure and dressing
  - Provide basic care of surgical or traumatic wounds and apply dressing appropriately
- 35. Carry out nasogastric tube placement
  - Pass a nesogastric tube into the stomach through stomach's contents. Should know how to ensure correct placement.
- 36. Use local anesthetics
  - Inject or topically apply a local anesthetic. Understand maximum doses of local anesthetic agents.
- 37. Apply splint for fractures
  - Can apply routine splints for fractures like Thomas, Neck of femur
- 38. Measure CVP (central venous pressure)
  - should be able to measure, interpret and monitor central venous pressure readings
- 39. To perform essential lifesaving procedures (BLS)
  - (tracheostomy, endotracheal intubation and chest intubation Should be competent at Basic Life Support)
- 40. Do Digital rectal examination and Proctoscopy
  - Should know common causes of bleeding per rectum and common perianal diseases and be able to diagnose them by means of digital rectal examination and proctoscopy.
- 41. Do Nutritional assessment
  - Calculate BMI, carry out nutritional assessment of patients and guide them according to their caloric