



SRI ADICHUNCHANAGIRI SHIKSHANA TRUST (R.)

## **BGS GLOBAL INSTITUTE OF MEDICAL SCIENCES**

(Affiliated to Rajiv Gandhi University of Health Sciences, Bangalore)  
No. 67, BGS Health & Education City, Uttarahalli Road, Kengeri,  
Bangalore- 560060, Karnataka

### **METHODS OF THE ASSESSMENT OF LEARNING OUTCOMES AND GRADUATE ATTRIBUTES:**

The course outcomes and program outcomes are defined based on the syllabus prescribed by Rajiv Gandhi university of health sciences to which BGS Global institute of medical sciences is affiliated. Syllabus has been framed as per the directions of National medical commission (formerly Medical council of India).

The institute has defined the program outcomes based on the following graduate attributes: Medical knowledge, planning abilities, problem analysis, modern tool usage, leadership skills, professionalism, professional ethics, communication, Impact of doctors on the society, environment and life-long learning.

### **COURSE OUTCOMES:**

The course out comes of the MBBS Program courses are as follows

#### **Anatomy**

at the end of the course students will be able to...

1. Understanding of the gross and microscopic structure and development of human body.
2. Comprehension of the normal regulation and integration of the functions of the organs and systems on basis of the structure and genetic pattern.
3. Understanding of the clinical correlation of the organs and structures involved and interpret the anatomical basis of the disease presentations.

#### **Physiology**

at the end of the course students will be able to...

1. Understanding of the normal functioning of the organs and organ systems of the body,
2. Comprehension of the normal structure and organization of the organs and systems on basis of the functions,
3. Understanding of age-related physiological changes in the organ functions that reflect normal growth and development.
4. Understand the physiological basis of diseases.

#### **Biochemistry.**

at the end of the course students will be able to...

1. Biochemical and molecular processes involved in health and disease.
2. Importance of nutrition in health and disease.
3. Biochemical basis and rationale of clinical laboratory tests, and demonstrate ability to interpret these in the clinical context.

## **Pathology**

at the end of the course students will be able to...

1. Comprehension of the causes, evolution and mechanisms of diseases,
2. Knowledge of alterations in gross and cellular morphology of organs in disease states,
3. Ability to correlate the natural history, structural and functional changes with the clinical manifestations of diseases, their diagnosis and therapy.

## **Microbiology**

at the end of the course students will be able to...

1. Understanding of role of microbial agents in health and disease,
2. Understanding of the immunological mechanisms in health and disease,
3. Ability to correlate the natural history, mechanisms and clinical manifestations of infectious diseases as they relate to the properties of microbial agents,
4. Knowledge of the principles and application of infection control measures,
5. An understanding of the basis of choice of laboratory diagnostic tests and their interpretation, antimicrobial therapy, control and prevention of infectious diseases.

## **Pharmacology**

at the end of the course students will be able to...

1. Knowledge about essential and commonly used drugs and an understanding of the pharmacologic basis of therapeutics.
2. Ability to select and prescribe medicines based on clinical condition and the pharmacologic properties, efficacy, safety, suitability and cost of medicines for common clinical conditions of national importance,
3. Knowledge of pharmacovigilance, essential medicine concept and sources of drug information and industry-doctor relationship,
4. Ability to counsel patients regarding appropriate use of prescribed drug and drug delivery systems.

## **Forensic Medicine and Toxicology**

at the end of the course students will be able to...

1. Understanding of medico-legal responsibilities of physicians in primary and secondary care settings.
2. Understanding of the rational approach to the investigation of crime, based on scientific and legal principles,
3. Ability to manage medical and legal issues in cases of poisoning / overdose,
4. Understanding the medico-legal framework of medical practice and medical negligence.
5. Understanding of codes of conduct and medical ethics.

## **General Medicine**

at the end of the course students will be able to...

1. Demonstrate understanding of the patho-physiologic basis, epidemiological profile, signs and symptoms of disease and their investigation and management,
2. Competently interview and examine an adult patient and make a clinical diagnosis,
3. Appropriately order and interpret laboratory tests.
4. Initiate appropriate cost-effective treatment based on an understanding of the rational drug prescriptions, medical interventions required and preventive measures,
5. Follow up of patients with medical problems and refer whenever required,
6. Communicate effectively, educate and counsel the patient and family,
7. Manage common medical emergencies and refer when required,
8. Independently perform common medical procedures safely and understand patient safety issues

## **General Surgery**

at the end of the course students will be able to...

1. Understanding of the structural and functional basis, principles of diagnosis and management of common surgical problems in adults and children,
2. Ability to choose, calculate and administer appropriately intravenous fluids, electrolytes, blood and blood products based on the clinical condition.
3. Ability to apply the principles of asepsis, sterilization, disinfection, rational use of prophylaxis, therapeutic utilities of antibiotics and universal precautions in surgical practice,
4. Knowledge of common malignancies in India and their prevention, early detection and therapy,
5. Ability to perform common diagnostic and surgical procedures at the primary care level,
6. Ability to recognize, resuscitate, stabilize and provide Basic & Advanced Life Support to patients following trauma,
7. Ability to administer informed consent and counsel patient prior to surgical procedures,
8. Commitment to advancement of quality and patient safety in surgical practice

## **Obstetrics and Gynaecology**

at the end of the course students will be able to...

1. Provide Peri-conceptual counselling and antenatal care.
2. Identify high-risk pregnancies and refer appropriately,
3. Conduct normal deliveries, using safe delivery practices in the primary and secondary care settings,

4. Prescribe drugs safely and appropriately in pregnancy and lactation,
5. Diagnose complications of labour, institute primary care and refer in a timely manner,
6. Perform early neonatal resuscitation,
7. Provide postnatal care, including education in breast-feeding,
8. Counsel and support couples in the correct choice of contraception,
9. Interpret test results of laboratory and radiological investigations as they apply to the care of the obstetric patient,
10. Apply medico-legal principles as they apply to tubectomy, Medical Termination of Pregnancy (MTP), Pre-conception and Prenatal Diagnostic Techniques (PC PNDT Act) and other related Acts.

### **Gynaecology:**

at the end of the course students will be able to...

1. Elicit a gynaecologic history; perform appropriate physical and pelvic examinations and PAP smear in the primary care setting,
2. Recognize, diagnose and manage common reproductive tract infections in the primary care setting,
3. Recognize and diagnose common genital cancers and refer them appropriately.

### **Paediatrics**

at the end of the course students will be able to...

1. Ability to assess and promote optimal growth, development and nutrition of children and adolescents and identify deviations from normal,
2. Ability to recognize and provide emergency and routine ambulatory and First Level Referral Unit care for neonates, infants, children and adolescents and refer as may be appropriate,
3. Ability to perform procedures as indicated for children of all ages in the primary care setting,
4. Ability to recognize children with special needs and refer appropriately,
5. Ability to promote health and prevent diseases in children,
6. Ability to participate in National Programmes related to child health and in conformation with the Integrated Management of Neonatal and Childhood Illnesses (IMNCI) Strategy.
7. Ability to communicate appropriately and effectively.

### **Orthopaedics (including Trauma)**

at the end of the course students will be able to...

1. Ability to recognize and assess bone injuries, dislocation and poly-trauma and provide first contact care prior to appropriate referral,
2. Knowledge of the medico-legal aspects of trauma.
3. Ability to recognize and manage common infections of bone and joints in the primary care setting.

4. Recognize common congenital, metabolic, neoplastic, degenerative and inflammatory bone diseases and refer appropriately.
5. Ability to perform simple orthopaedic techniques as applicable to a primary care setting.
6. Ability to recommend rehabilitative services for common orthopaedic problems across all ages.

### **Community medicine**

at the end of the course students will be able to...

1. Understanding of physical, social, psychological, economic and environmental determinants of health and disease,
2. Ability to recognize and manage common health problems including physical, emotional and social aspects at individual family and community level in the context of National Health Programmes,
3. Ability to Implement and monitor National Health Programmes in the primary care setting,
4. Knowledge of maternal and child wellness as they apply to national health care priorities and programmes,
5. Ability to recognize, investigate, report, plan and manage community health problems including malnutrition and emergencies.

### **Dermatology, Venereology & Leprosy**

at the end of the course students will be able to...

1. Understanding of the principles of diagnosis of diseases of the skin, hair, nail and mucosa,
2. Ability to recognize, diagnose, order appropriate investigations and treat common diseases of the skin including leprosy in the primary care setting and refer as appropriate.
3. A syndromic approach to the recognition, diagnosis, prevention, counselling, testing and management of common sexually transmitted diseases including HIV based on national health priorities,
4. Ability to recognize and treat emergencies including drug reactions and refer as appropriate

### **Psychiatry**

at the end of the course students will be able to...

1. Ability to promote mental health and mental hygiene,
2. Knowledge of etiology (bio-psycho-social-environmental interactions), clinical features, diagnosis and management of common psychiatric disorders across all ages,
3. Ability to recognize and manage common psychological and psychiatric disorders in a primary care setting, institute preliminary treatment in disorders difficult to manage, and refer appropriately,
4. Ability to recognize alcohol/ substance abuse disorders and refer them to appropriate centers,

5. Ability to assess risk for suicide and refer appropriately, 6. Ability to recognize temperamental difficulties and personality disorders,
7. Assess mental disability and rehabilitate appropriately,
8. Understanding of National and State programmes that address mental health and welfare of patients and community.

### **Respiratory Medicine**

at the end of the course students will be able to...

1. Knowledge of common chest diseases, their clinical manifestations, diagnosis and management,
2. Ability to recognize, diagnose and manage pulmonary tuberculosis as contemplated in National Tuberculosis Control programme,
3. Ability to manage common respiratory emergencies in primary care setting and refer appropriately.

### **Otorhinolaryngology**

at the end of the course students will be able to...

1. Knowledge of the common Otorhinolaryngological (ENT) emergencies and problems,
2. Ability to recognize, diagnose and manage common ENT emergencies and problems in primary care setting,
3. Ability to perform simple ENT procedures as applicable in a primary care setting,
4. Ability to recognize hearing impairment and refer to the appropriate hearing impairment rehabilitation programme.

### **Ophthalmology**

at the end of the course students will be able to...

1. Knowledge of common eye problems in the community
2. Recognize, diagnose and manage common eye problems and identify indications for referral,
3. Ability to recognize visual impairment and blindness in the community and implement National programmes as applicable in the primary care setting.

### **Radio-diagnosis**

at the end of the course students will be able to...

1. Understanding of indications for various radiological investigations in common clinical practice,
2. Awareness of the ill effects of radiation and various radiation protective measures to be employed,
3. Ability to identify abnormalities in common radiological investigations.

## **Radiotherapy**

at the end of the course students will be able to...

1. Clinical presentations of various cancers,
2. Appropriate treatment modalities for various types of malignancies,
3. Principles of radiotherapy and techniques.

## **Anaesthesiology**

at the end of the course students will be able to...

1. Describe and discuss the pre-operative evaluation, assessing fitness for surgery and the modifications in medications in relation to anaesthesia / surgery.
2. Describe and discuss the roles of Anaesthesiologist as a peri-operative physician including pre-medication, endotracheal intubation, general anaesthesia and recovery (including variations in recovery from anaesthesia and anaesthetic complications),
3. Describe and discuss the management of acute and chronic pain, including labour analgesia.
4. Demonstrate awareness about the maintenance of airway in children and adults in various situations.
5. Demonstrate the awareness about the indications, selection of cases and execution of cardiopulmonary resuscitation in emergencies and in the intensive care and high dependency units,
6. Choose cases for local / regional anaesthesia and demonstrate the ability to administer the same,
7. Discuss the implications and obtain informed consent for various procedures and to maintain the documents.

Assessment methods as directed by the RGUHS is followed in the institution. Summative assessment was given importance before the introduction of competency based medical education (CBME). Summative assessment included three internal assessments conducted at the college level and final examinations conducted at university level. With the introduction of CBME along with the summative assessment, continuous assessment in the form of formative assessment is adopted. Students are assessed not just on term/final exams but they are assessed throughout the academic year and constant feedback is provided to improve the learning process of the students. Seminars, assignments, maintenance of records and log books, OSPE, OSCE, tutorials, projects, field visits, regularity in attending classes, day to day performance in class rooms are all considered for formative assessment. Students are required to enter these details in the log book assigned for each subject. Blueprint of the log book is provided by RGUHS.