

**Residency Program**  
*Doctor of Medicine (MD)*  
**Curriculum (Phase-A)**

***Child and Adolescent Psychiatry***



***Faculty of Medicine***  
**Bangabandhu Sheikh Mujib Medical University**  
**Dhaka, Bangladesh**

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## 1. Introduction

Child & Adolescent Psychiatry is a branch of medicine and the largest specialty in the discipline of psychiatry concerned with the biopsychosocial approach to etiology, assessment, diagnosis, treatment and prevention of developmental, emotional and behavioral disorders from infancy through adolescence alone or as they coexist with other medical disorders. Child psychiatric disorders are important as sources of suffering for children and those around them. Also because they interfere with social and educational development and can lead to life-long social and psychiatric problems. Child and adolescent psychiatry differs from adult psychiatry in almost all spheres. A child is not a miniature adult in term of mind, body and behavior. The developmental aspect is prime important in understanding psychiatric problems in this age section. From the evidence based findings, it is well established that etiology, presentation, course, treatment and prognosis of child and adolescent psychiatric disorders are different than adult psychiatric disorders. That cause distress for the effected children and adolescents, interfere social and educational development and can lead to lifelong social and psychiatric problems Child and Adolescent psychiatry is further important because unrecognized and untreated child mental health problems present in the different facilities of health care, reduce the possibility of satisfactory outcome ,absorb increasing amount of professional time with no benefit, further possibility of harm,Overall, child psychiatric problems cause huge burden on nation ,adverse effect on the productivity, economic stability and viability with long term negative impact on national economy, prosperity and progress.Further, onsets of many psychiatric disorders are in this period of life and some are confined within this period and some have continuity in adult life even whole life span. Early intervention, therefore, is a crucial point that can minimize the distress and impact on the effected child and burden to the caregivers, risk to be predisposed for physical and psychiatric disorders and prevents its continuum in the adulthood. With this view, the child and adolescent mental health services is unique in term of interdisciplinary and multidisciplinary team works in main stream health care system and community/school based care. The child and adolescent psychiatrist is the key professional and plays pivotal role in providing training, specialized services and supervision of non-specialized allied services in this field.

Child and Adolescent Mental Health Services not only decrease the child's distress and impairment, it reduces the burden of care givers, facilitates child's development. These services reduce the burden on adult mental health services, already overburden child health services and neurology, medicine and other medical services. These child and adolescent sufferers are not getting proper treatment and that not only causes the increase of distress and burden of the children and family, but also has huge adverse effect in health of the nation as a whole. In a country with very few child mental health professionals, there is a vast gap between need and provisions that must be addressed. We have huge scarcity of Child Mental Health Services and Professionals. The University is the legacy to offer degree by starting residency course on Child and Adolescent Psychiatry.

After the introduction of MD Residency Programme by BSMMU, it has gained tremendous popularity and this competency based program is creating a good number of high quality post graduate physicians and surgeons. The University now has introduced this type of competency-based program on Child and Adolescent Psychiatry.

## 2. Objectives

The candidates in the program shall achieve the diverse objectives are followings:

- **Clinical expertise:** to assess cases, establish diagnoses, formulate and implement treatment plan, work in a team and proper documentation.
- **Health advocacy:** to apply appropriate determinants consequences of mental health, mental health promotion and prevention.
- **Academic perspectives:** to create a life-long programme for continuous medical education, read, interpret and apply new findings, integrate and apply new knowledge and technology. To enhance critical thinking, self-learning, and interest in research and development of

patient-care service.

- **Collaborative capacities:** to establish treatment plan, work efficiently with other health care professionals and work collaboratively with relevant agencies.
- **Administrative capacity:** to develop cost effective treatment plan, and mental health services, utilize resources effectively and conduct multidisciplinary work. To enhance sensitivity and responsiveness to community needs and the economics of health care delivery.
- **Effective communication:** to establish therapeutic alliance with patients and relatives/caregivers, educate patient, families, teachers, other health and social service professionals, and public and communicate effectively with teachers, prison health care staff, law and law enforcing personnel.
- **Professionalism:** to abide by ethical principles and profession; respect patient rights and broader human rights; support patient autonomy and dignity and respect patient patient's culture, beliefs and values. Achieve the professional requirements for specialty-specific training (Phase B).
- **Professional attitude:** To cultivate the correct professional attitude and enhance communication skill towards patients, their families and other healthcare professionals.

### 3. Admission Requirements

This shall be according to the general rules of admission of respective faculty of the University. Medical graduate with successful completion of internship and with full registration with the BMDC will be selected by competitive admission test.

#### A. Pre-requisites for admission in Phase-A

- a) MBBS or equivalent degree as recognized by BMDC
- b) One year of internship / in-service training
- c) Completion of one year after internship / in-service training
- d) BMDC registration

B. The applicants should not be above 45 years of age on enrolment.

C. Candidates for residency have to sit for written MCQ-based admission test on basic medical Sciences and faculty-based topics

### 4. Phase A (Core Clinical) Training:

The two-year Core Medical Training provides foundation training in Psychiatry which includes components of educational (academic) and training program in basic sciences, general psychiatry and medicine relevant to child and adolescent psychiatry. This training program will focus on developing core knowledge and skills, providing a foundation for consolidation and further study within advanced specialty-specific training.

#### 4. 1. *Expected outcome at the completion of Phase A*

- Be able to perform specialist assessment of patients and document relevant history and examination on culturally diverse patients to include:
  - Presenting or main complaint
  - Past medical and psychiatric history
  - Systemic review
  - Family history
  - Socio-cultural history
  - Developmental history
- Demonstrate the ability to construct formulations of patients' problems that include appropriate differential diagnoses.
- Demonstrate the ability to recommend relevant investigation and treatment in the context of the clinical management plan. This will include the ability to develop and document an investigation plan including appropriate medical, laboratory, radiological and psychological

investigations and then to construct a comprehensive treatment plan addressing biological, psychological and socio-cultural domains.

- Based on a comprehensive psychiatric assessment, demonstrate the ability to comprehensively assess and document patient's potential for self-harm or harm to others.
- Assessment of risk, knowledge of involuntary treatment standards and procedures, the ability to intervene effectively to minimize risk and the ability to implement prevention methods against self-harm and harm to others. This will be displayed whenever appropriate, including in emergencies
- Based on the full psychiatric assessment, demonstrate the ability to conduct therapeutic interviews; that is to collect and use clinically relevant material. The doctor will also demonstrate the ability to conduct a range of individual, group and family therapies using standard accepted models and to integrate these psychotherapies into everyday treatment, including biological and socio-cultural interventions.
- Demonstrate the ability to concisely, accurately and legibly record appropriate aspects of the clinical assessment and management plan.
- Develop the ability to carry out specialist assessment and treatment of patients with chronic and severe mental disorders and to demonstrate effective management of these disease states.
- Use effective communication with patients, relatives and colleagues. This includes the ability to conduct interviews in a manner that facilitates information gathering and the formation of therapeutic alliances
- Demonstrate the ability to work effectively with colleagues, including team working
- Develop appropriate leadership skills
- Demonstrate the knowledge, skills and behaviors to manage time and problems effectively
- Develop the ability to conduct and complete audit in clinical practice
- Develop an understanding of the implementation of clinical governance
- Ensure the ability to inform and educate patients effectively
- Develop and utilize the ability to teach, assess and appraise
- Develop an understanding of research methodology and critical appraisal of the research literature
- Ensure to act in a professional manner at all times
- Develop the habits of lifelong learning

#### **4.2. Structure of Training**

1. The core program consist of two years of supervised training with formative assessment and feedback
2. The Residents will undergo one year training in wide spectrum in psychiatry. General Psychiatry is at the core of basic training although all residents are expected to gain experience in the specialties of psychiatry.
3. The Residents will also undergo one year training in Medicine, Neurology, Paediatrics relevant to hospital liaison psychiatry.
4. The training scheme must provide an overall balance of hospital and community experience. The programme must ensure that the rotation plan for an individual trainee enables them to gain the breadth of experience required. Trainees will need to monitor the scheme through their portfolio and will be monitored themselves by the scheme through its quality management processes. The designated supervisor with the aim of ensuring high quality training will carry out the evaluation of performance of a trainee periodically. In addition; residents will receive theoretical knowledge on customized ways during this residency-training period to make the training sensible and meaningful.

#### **4.3 Training Rotations**

Total duration: 24 months. Phase- A training consists of eight Blocks. Duration of each Block is of three months. The last Block (Block-8) will be allotted for eligibility assessment and Phase Final Examination. The 8 Blocks are as follows:

BLOCK	SPECIALITY	DURATION (months)
1	General Psychiatry	3
2	General Psychiatry	3
3	General Psychiatry	3
4	Liaison Psychiatry (Internal Medicine)	3
5	Liaison psychiatry (Neurology)	3
6	Liaison psychiatry (General Paediatrics)	3
7	General Psychiatry	3
8	Assessment and examination	3

Of the seven blocks placement in psychiatry, 1-3 and 7 blocks are for training in General Psychiatry. The 4th-6th blocks placements are in Liaison Psychiatry. Among these, Block 4 is for training in Internal Medicine and allied. Block 5 is in Neurology, Block-6 is in Paediatrics,

## 5. Domains of Learning

It covers three broad areas- knowledge, skills and attitude. The residents shall undergo through active and integrated learning process in the above three areas to acquire intended learning outcomes that have been set to achieving the program objectives:

### 5.1. Knowledge

- Knowledge about—psychopathology, diagnosis, aetiology, co-morbidity, complications, management, prevention of Specific conditions like: Emotional disorders, Behavioural disorders and developmental disorders
- Expert knowledge of the implications of mental and physical illness and disability, and personality disorders, for the functioning of parents.
- Knowledge of, and ability to detect, physical illnesses as they affect children and adolescents and to carry out a developmental assessment.
- Expert knowledge of theory and practice of psychotropic drug use in childhood and adolescence.
- Knowledge of social organizations (families and larger groups) and ability to consult usefully to institutions, acquired through supervised experience of advice to outside institutions.
- Knowledge of the impact of cultural, social and family influences on the manifestation of psychiatric disorder in children and adolescents.
- Knowledge of legal issues relevant to children and adolescents.
- Expert knowledge of all forms of psychopathology as they present in people with learning disability.
- Expert knowledge of psychotropic medication and its effects and use in people with learning disability.
- Relevant knowledge of, and an understanding of, the work of relevant-disciplines, for example, child psychiatry, forensic psychiatry, neuropsychiatry and rehabilitation.
- Knowledge of particular legal issues for people with learning disabilities, especially consent, and Court of Protection

### 5.2. Skills

#### Communication Skills:-

- Learn to take a formal psychiatric history including incorporating information from other sources (parents or care givers)

- Develop a basic understanding of the strong emotional relationship between patient and doctor especially within the realm of psychiatric illness and have the competence to use this to facilitate good communication in the interest of the patient
- High level of competence in communication with children and adolescents
- Appreciate the importance of forming a therapeutic alliance and the role of empathy
- Ability to assess the quality of parent–child relationships and determine the nature of any interaction needed.
- Ability to communicate effectively with people of all degrees of learning disability.
- Be able to engage and interview a patient and their caregiver including any specific cultural issues
- Be able to engage and negotiate treatment with often frightened or resistant patients in non psychiatric settings
- Be able to undertake these tasks in a community or hospital setting
- Share information with the patient and family including the implications of diagnosis and benefits and disadvantages of treatment
- Understand how to adapt assessments for different developmental stages.

**Information evaluation skills:-**

- Select the crucial pieces of information for making a differential diagnosis
- Ability to recognize abuse, link with child protection agencies, plan the rehabilitation of abused children and advise on the management of failures in care giving.
- Ability to identify factors relevant to the development or maintenance of disturbed behaviour, for example, abuse, bereavement and advice on the management of failures in care-giving.
- Evaluate the role of the personal, social and cultural factors in the patient's presentation.
- Formulate a management plan including when to refer for specialist assistance.

**Treatment skills:-**

- Encourage adherence to treatment, explore, and eliminate barriers to this.
- Ability to assess and manage pervasive developmental disorder.
- Ability to manage epilepsy in people with learning disability.
- Ability to identify effects of physical disorders among people with severe learning disability.
- Basic prescribing skills especially for Children and adolescents
- Recognize adverse effects of treatment and distinguish them from illness.

**Learning skills:-**

- Sustain self-directed independent learning such that the student will keep up to date with new advances in psychiatry and psychological aspects of medicine throughout their professional life.

**Teamwork skills:-**

- To cooperate with medical colleagues and other healthcare workers.
- To be aware of patient and family organizations and other community services that support and promote mental health.
- Ability to work effectively with families, careers and multi-disciplinary group

**5.3. Attitudes (Demonstrated through Behavior)**

It is important that residents develop appropriate attitudes. These attitudes need to be encouraged during the teaching of psychiatry and other disciplines. It is important that teachers model these attitudes and that students have the ability to internalize them. Internalizing occurs in the way that students work with patients and members of staff.

Residents should:

- Recognize that the profession of medicine involves life-long learning
- Show capacity for critical thinking and constructive self-criticism

- Be able to tolerate uncertainty and acknowledge the opinion of others
- Be able to work constructively with other health professions
- Recognize the value of good doctor-patient relationships
- Appreciate the value of the developmental approach to clinical problems emphasizing the stage of the life cycle and longitudinal perspective of the illness

## **6. Teaching and Learning Methods**

For trainees to maximize their learning opportunities it is important that they work in “a good learning environment”. This includes encouragement for self directed learning as well, as recognizing the learning potential in all aspects of day to day work. The bulk of learning occurs as a result of clinical experiences (experiential learning, on-the-job learning) and self-directed study. The degree of self-directed learning will increase as trainees become more experienced. Teaching and learning occurs using several methods that range from didactic lectures to planned clinical experiences. Aspects covered will include knowledge, skills and practices relevant to general Psychiatry as foundation of Child and Adolescent Psychiatry in order to achieve specific learning outcomes and competencies. The theoretical part of the curriculum presents the current body of knowledge necessary for practice as a general psychiatrist. In this program this will be imparted using lectures, grand teaching rounds, clinico-pathological & psychopathological meetings, morbidity/mortality review meetings, literature reviews and presentations, journal clubs, self-directive learning, seminars, workshops and conferences.

## **7. Record of Training**

The evidence required to confirm progress through training includes:

- Details of training rotations, weekly timetables and duty rosters case mixes and numbers of practical procedures and outcomes.
- Confirmations of attendance at events in the educational programme, at departmental and inter-departmental meetings and other optional educational events.
- Confirmation (certificates) of attendance at subject based/ skills-training/ instructional courses.
- Recorded attendance at conferences and meetings
- A properly completed logbook with entries capable of testifying to the training objectives which have been attained and the level of performance achieved
- CME activity
- Supervisor’s reports on observed performance in the work place.

### **7.1. Logbook:**

Residents are required to maintain a logbook in which entries of academic / professional work done during the period of training should be made on a daily basis and signed by the supervisors. Completed and duly certified logbook will form a part of application for appearing in Phase Final Examinations.

### **7.2. Portfolio:**

This is a collection of evidence documenting trainee’s learning and achievements during their training. The trainee takes responsibilities for the portfolio’s creation and maintenance. It will form the basis of assessment of progression.

## **8. Assessments**

The assessment method is comprehensive, integrated and phase-centered attempting to identify attributes expected of specialists for independent practice and lifelong learning and covers cognitive, psychomotor and affective domains. It keeps strict reference to the components, the contents, the competencies and the criteria laid down in the curriculum.



The assessment procedure for Phase A consists of three parts:

1. Formative Assessment
2. Summative Assessment (Phase-A Final)

### **8.1. Formative Assessment:**

Formative assessment will be conducted throughout the training phases. It will be carried out for tracking the progress of residents, providing feedback, and preparing them for final assessment (Phase completion exams).

There will be Continuous (day-to-day) and periodic type of formative assessment.

• **Continuous (day-to-day) formative assessment** in classroom and workplace settings provides guide to a resident's learning and a faculty's teaching / learning strategies to ensure formative lesson / training outcomes.

• **Periodic formative assessment** is quasi-formal and is directed to assessing the outcome of a **block placement** or **academic module completion**. It is held at the end of Block Placement and Academic Module Completion. The contents of such examinations include **Block Units** of the Training Curriculum and **Academic Module Units** of the Academic Curriculum. □

• **End of Block Assessment (EBA):** End of Block Assessment (EBA) is a Periodic Formative assessment. The End Block Assessment will be conducted by the Department of Psychiatry. It is undertaken after completion of each training block, assessing knowledge, skills and attitude of the residents. Components of EBA are written examination, Structured Clinical Assessment (SCA), medical record review, logbook review and portfolio assessment. Incomplete block training must be satisfactorily completed by undergoing further training for the block to be eligible for appearing in the next phase completion examination.

### **8.2. Summative Assessment**

Summative assessment will be held in Phase A examination will be held at the end of second year. Before appearing the examination, candidates must have to complete the Phase- A residency training along with successful completion of the all components of formative assessment.

### **8.3. Assessment procedure of Phase A Final Examination:**

#### **i) Written Examination:**

Consisting of two papers: 200 Marks

- **Paper I (General Psychiatry):** Marks-100: SAQs: 20 questions: 3 hours, pass mark 60%
  - **Paper II (Liaison Psychiatry):** Marks-100: SAQs: 20 questions: 3 hours, pass mark 60%
- Each paper (Paper I, Paper II) comprises of 100 marks and 20 short essay questions (SAQ) carrying 5 marks for each.

For Paper I, 10 questions will be from Group A and 10 questions will be from Group B.

For Paper II, 10 questions will be from Group A and 10 questions will be from Group-B.

To pass the examination, the candidate will have acquired knowledge in the relevant subjects as described in the learning module, with particular reference to recent advances. The questions will be invited from teachers in psychiatry and relevant subjects. Moderation of papers, examination of scripts, marking system and qualifying marks will be the same as existing rule of the University.

**Content** The content of written examination will be as per syllabus (learning modules) of Phase A in the curriculum. Basic elements of the content are:

1. Clinical Methods (knowledge part)
2. Emergency presentations
3. Common symptom-based presentations
4. Problem Solving Skill (History, Physical examinations etc.)
5. Planning Investigation and Interpretation of data
6. Clinical Reasoning Skill/Clinical judgment

7. Synthesis of information/ Interpretation of Medical Literature
8. System Specific Knowledge
9. Ability to judicious diagnostic tests
10. Management skill and Professional Behaviour
11. Disease Prevention

**Organization:**

Written examination will be completed in two consecutive days

**Paper Setters:** At least 20 in numbers and they are Assistant Professor and above. Among them, 10 from Psychiatry and 10 from Medicine, Neurology, Paediatrics and Psychology and 50% are external. Each paper setters will be asked to submit minimum 10 Short Answered Questions as per above guidelines. Paper Setters to be selected from the respective discipline, as well as, from disciplines/services covered during the rotation as per curriculum.

**Moderators:** Four in numbers and they should be Associate and above; 2 from Psychiatrists (1 from Child and Adolescent Psychiatry, 1 from General Psychiatry), 1 from Medicine and 1 from paediatrics. Among them 50% are external. The Convener is from the Department of Psychiatry for moderation. Moderators will select the questions and after finalization of questions they will print and do packaging of examination question sheets. They will prepare Standard Response Outline (SRO). Then they should submit it to the Controller of Examination.

**Script Examiners:** Four in numbers and they are Professor/Associate Professor; 2 from Psychiatrists (1 from Child and Adolescent Psychiatry, 1 from General Psychiatry), 1 from Medicine and 1 from paediatrics. Among them 50% are external. Psychiatrists will examine Group A and Group B of the Paper I and Examiner of Medicine will examine Group A and Examiner from Paediatrics will examine Group B of the Paper II. Script examination has to be done in the University premises in an exclusive enclosure.

**Table of the Format and marks of Phase A Final Written Examination:**

Subject of studies	Marks allotted	Pass Marks
<b>Phase-A</b>	200	120
<b>Paper-I: General Psychiatry</b>  Group A- Basic Sciences Relevant to Psychiatry Group B – Comprehensive Psychiatry	100 (Group A-50) (Group B-50)	60
<b>Paper-II: Liaison Psychiatry</b>  Group A- Psychiatry in Medicine & Neuropsychiatry Group B- Psychiatry in Paediatrics	100 (Group A-75) (Psychiatry in Medicine-50 Neuropsychiatry-25}  (Group B-25)	60

**ii) Clinical Examination: Total Marks- 200**

There are four examiners (Associate Professor and above); 2 from Psychiatry (1 from Child and Adolescent Psychiatry, 1 from General Psychiatry), 1 from Medicine and 1 from Paediatrics; 50% are external. The Convener is from the Department of Psychiatry to conduct the examination.

The clinical examination will be based on the relevant learning modules. The main areas of assessment are the candidate's ability to establish a satisfactory relationship with the patient, take a full psychiatric history, carry out an accurate mental state examination, make appropriate deduction from the information available to him, and concluded about the differential diagnosis of the disorder from which the patient is suffering. Psychiatry clinical examination will test clinical skills of psychiatric assessment: the ability of relate to the patient, to take a history and examine the mental state and to exercise judgment in bringing the relevant information together to make accurate assessments and management plan. For Liaison psychiatry, clinical examination, assessment will also be extended on psychiatric assessment of patients with physical illness, resident's ability to grasp the basic clinical skills in general medicine, neurology, paediatrics and other disciplines relevant to liaison psychiatry. Candidate is expected to carry out a physical examination wherever necessary.

Residents will be expected to examine- (would it be included in all subjects)

**A Structured Observed Long Case (One hour): Marks-100**

This will be examination of a long case with or without selected investigations reports as per curriculum. There will be one long case and case taking will be 40 minutes for each candidates to examine the case and 20 minutes crossings for the examiners (10 minutes for each) to examine the candidate. There will be two examiners per examinee.

**Short cases (30 to 40 minutes): Marks- 100**

Each candidate will be examined by two examiners for this period during which the candidate should be able to examine and face crossing four short cases.

Cases will be collected and examination will be conducted by the Convener of the examination.

**iii) Structured Clinical Assessment (SCA): Marks-100**

For two papers (Paper-I and Paper-II), there will be 12 stations, of which 2 interactive stations and 10 other stations. Duration of the examination is 70 minutes. A total mark of SCA is 100. Of this, 10 mark each for interactive stations (Total 20 marks) and 8 marks each for other stations (Total 80 marks). Pass mark—60%

**Station Setters:** Six in numbers and they are Assistant Professor and above and among subject specialist two should be external. Each will be asked to set minimum 4 stations covering specified areas and to be submitted to the Controller of Examinations.

**Moderators:** There are four examiners (Associate Professor and above); 2 from Psychiatry (1 from Child and Adolescent Psychiatry, 1 from General Psychiatry), 1 from Medicine and 1 from Pediatrics; 50% are external. Moderators will select the stations and after finalization they will print and do packaging and Station planning. They will prepare the lists of requirements and submit it to the Controller of Examination. The Moderator from the Department of Psychiatry will be appointed as Convener of the Moderation.

The Phase - A Final Examination will be conducted through a Standard Operation Procedure as per rule of the University. To pass the Examination as a whole, candidates must pass written, clinical & SCA component separately at one setting-component are not transferable or divisible. A candidate who fails in Phase-A examination may reappear in the subsequent examination according to the rules of the university.

## **9. Supervision and Training Monitoring:**

The raining will incorporate the principles of gradually increasing responsibility, and provide each trainee with a sufficient scope, volume and variety of experience in a range of settings that include inpatients, outpatients, emergency and intensive care. All elements of work in training rotation will be supervised with the level of supervision varying depending on the experience of the resident and the clinical exposure. Outpatient and referral supervision must routinely include the opportunity to personally discuss all cases. As training progresses the resident should have

the opportunity for increasing autonomy, consistent with safe and effective care of the patient. Residents will at all times have a supervisor, responsible for overseeing their education and training.

**Supervisors** are responsible for supervision of learning throughout the program to ensure patient safety, service delivery as the progress of the resident with learning and performance. They set the lesson plans based on the curriculum, undertake appraisal, review progress against the curriculum, give feedback on both formative and summative assessments and ensures proper recording and signing of logbook. The residents are made aware of their limitations and are encouraged to seek advice and receive help at all times.

**The Course Coordinator** of each department coordinates all trainee and academic activities of the program in collaboration with the **Course Manager(s)**. the **Course Director** of each faculty directs, guides and manages curricular activities under his/her jurisdiction and is the person to be reported to for all events and performances of the residents and the supervisors.

## **10. Curriculum Implementation, Review and Updating:**

Both Supervisors and Residents are expected to have a good knowledge of the curriculum and should use it as a guide for their training programme. Since Medicine has historically been rapidly changing specialty the need for review and up-dating of curricula is evident. The Curriculum is specifically designed to guide an educational process and will continue to be the subject of active redrafting, to reflect changes in both Medicine and educational theory and practice. Residents and Supervisors are encouraged to discuss the curriculum and to feedback on content and issue regarding implementation with the Course Director. Review will be time tabled to occur annually for any minor changes to the curriculum.

## **11. Syllabus**

The aim of the syllabus for Phase A training is to guide the Residents to acquire broad based knowledge on Medicine and fundamentals of Psychiatry before entering the Phase B specialty-specific training. Patients present themselves with problems and it is the problem that needs solving. A specialist who has this knowledge will be able to solve the problem in a better way. So the ultimate objective of Phase A training is to produce a knowledgeable, competent, altruistic specialist with up to date background knowledge of Medicine and Basic Psychiatry. Emphasis has been laid on common general medical conditions associated with psychiatric disorders frequently encountered in this part of the world.

By the end of Phase A Training (Core Medical Training) the Resident should be able to:

- a. Assess presenting symptoms and signs
- b. Formulate appropriate investigations and accurately interpret investigation reports
- c. Communicate the diagnosis and prognosis
- d. Institute appropriate treatment recognizing indications, contraindications and side effects of common clinical conditions:

On this background, it is expected that Residents will be able to (i) acquire knowledge [of psychiatric disorders, common medical conditions related with psychiatric disorders, emergencies, & rehabilitations], (ii) acquire skills [diagnostic, clinical and decision making] and (iii) develop attitude [caring, learning, & ethical].

### **11.1 Syllabus contents**

Below is the basic guideline of the contents of Phase-A MD Residency programme in Child and Adolescent Psychiatry. However, this is not fully inclusive and residents are essentially expected to achieve recent advancement related to the discipline.

## Paper-I: General Psychiatry

- **Group-A: Basic Sciences relevant to Psychiatry**
- **Group-B: Comprehensive Psychiatry**

### ♦ Group-A: Basic Sciences relevant to Psychiatry

#### a) Brain and Behaviour:

- I. **Neuroanatomy:** Structure of the nerve, plasma membrane, nerve cell process. The types of cell found within nervous system. Neuronal synapses. The general anatomy of the brain, cranial nerves and spinal cord. Functions of the lobes and some major gyri including prefrontal cortex, cingulate gyrus and limbic system. The anatomy of the basal ganglia. The internal anatomy of the temporal lobes especially hippocampal formation, amygdala and reticular formation, the major white matter pathways, corpus callosum. Papez's circuit and other circuits relevant to integrated behaviour. The major neurochemical pathways.
- II. **Neurophysiology:** The basic concepts in the physiology of nervous system, synapses and receptors, including synthesis, release and uptake of transmitters. Basic knowledge of action potentials, resting potentials, ion fluxes and channels etc. The physiology of nervous system involved in integrated behavior including perception pain, memory, motor function, arousal, drives and the emotions including aggression fear and stress Knowledge of disturbances of their functions with relevance to organic and nonorganic psychiatry. Tin localization of cerebral functions throughout the life span and their relevance to the effects of injury at different ages to the brain and behavior. An understanding of neurodevelopmental models of psychiatric disorders and of cerebral plasticity. A basic knowledge of the physiology of arousal and sleep with particular reference to noradrenergic activity and the locus ceruleus. Nature of dream and its relationship with sleep. The normal EEC and evoked response techniques. Their application in investigation of cerebral pathology, seizure disorders, sleep and psychiatric disorders. The effects of drug and different disorders on EEG.
- III. **Neuroendocrinology:** The physiology of nervous and endocrine systems involved in integrated behavior including perception, pain, memory, motor function, arousal, drives and the emotions including aggression, fear and stress. Knowledge of disturbances of their functions with relevance to organic and nonorganic psychiatry. An understanding of the neuroendocrine system, specially the control system of the secretion of hypothalamic and pituitary hormones, and posterior pituitary function. A basic-understanding of neuroendocrine rhythms and their disturbances in psychiatric disorders. General understanding of anatomical considerations, formation, secretion, transport, metabolism, effect and regulation of thyroid hormones, adrenal hormones, gonadal hormones and the hormones of the pancreas Endocrine functions of the kidneys and pineal gland; hyper and hypo functions of these hormones. Endocrine disorders: pathology of endocrine glands including hyperthyroidism, hypothyroidism, hyper-pituitarism, hypo-pituitarism, hyper- parathyroidism, hypoparathyroidism, hypoadrenalism, hyperadrenalism in relation to psychiatric disorders, diabetes.
- IV. **Neurochemistry:** Neurotransmitters: synthesis, storage and release Ion channels and calcium flux in relation to ion channels. Receptors: structures and function in relation to the transmitters listed below in pre-synaptic and post-synaptic receptors. Basic biochemistry of noradrenalin, serotonin, dopamine, GABA, acetylcholine, excitatory amino acids. Neuropeptides: Elementary knowledge of neuropeptides, particularly corticotrophin releasing hormone and cholecystokinin, enkephalins and endorphins.Chronobiology.
- V. **Neuropathology:** the neuropathology of organic disorders including the dementia, delirium and amnesic disorder. Lobar damage and its dysfunctional presentation. The neuropathology of schizophrenia, obsessive-compulsive disorder (OCD), neuropathology of other psychiatric disorders particularly brain damage related to stress - the 'glucocorticoid cascade hypothesis. Conditions associated with mental retardation including inborn errors of

metabolism. Pathology of degenerative disorders including Alzheimer's disease, Pick's disease, Huntington's disease. Parkinson's disease and neurochemical pathology of tardive dyskinesia. Association between the localization of gross cerebral lesions and clinical signs (including tumors, trauma, cerebro-vascular disease, infections including slow virus and unconventional agent affections). Psycho-neuroimmunology.

VI. **Behavioural Genetics:** Basic concepts - chromosomes, cell division, gene structure, transcription and translation, normal karyotype, pattern of inheritance. Traditional techniques: Family, twin and adoption studies. Techniques of molecular genetics: restriction enzymes, molecular cloning and gen probes and others. Condition associated with chromosomal abnormalities-cytogenic and Mendelian disorders, disorders with multifactorial inheritance, Fragile X syndrome. Principal inherited conditions encountered in psychiatric-practice and the genetic contribution to specific psychiatric-disorders. Prenatal identification, Chromosomal and DNA analysis. Genetic counseling. Molecular and genetic heterogeneity. Phenotype/genotype correspondence. Nutritional disorders: protein energy malformation, vitamin deficiency disease and its relation to psychiatric disorders. Pathology of obesity. Human Genom Project.

**b) Behavioural Sciences:**

- I. *Basic Psychology:* Introduction to psychology and its major perspectives: behavioural (learning), developmental, cognitive, and psychoanalytic. Sensation and perception: basic principles of visual and auditory perception. The relevance of perceptual theory of illusions, hallucinations and other psychopathology. The process of perception- organization and perception, interpretation and perception. Motivation: theories of motivation. Classification of needs with emphasis on Maslow's hierarchy of needs. Internal and external sources of motivation. Eating disorders. Human obesity. Important social motives. Emotion: development of emotion, components of emotional response, nature and classification. Theories of emotion. Cognitive appraisal, differentiation and the status of primary. Emotion and performance. Learning: learning theories including classical, operant, observational and cognitive models. The concepts of extinction and reinforcement. Nature and schedules of reinforcement. Learning process and etiological formulation of clinical problems. Escape and avoidance learning. The cognitive approach to learning. Clinical application of reinforcement in behaviour therapy. Use of punishment. Memory: memory systems and information processing. Type of memory process of encoding, storage and retrieval. The process of forgetting, emotional factors and retrieval. Distribution, inference, schemata and elaboration in retrieval. The relevance of this to memory disorders and their assessment. Improving memory. Memory and brain. Thinking and language: the nature and development of thinking and its relationship with language. Concepts and reasoning. Problem solving strategies. Decision making. Component of spoken language and language development. Theories of language. Intelligence: nature, definition and components of intelligence, concept of IQ and its stability. Intelligence tests, cultural influences, recent advancement in assessing intelligence. Aptitude and achievement tests. Extreme of intelligence. Heredity, environment and intelligence. Personality: different perspectives of personality (psycho-dynamics, trait and type), behavioural and social learning, humanistic and interactions approaches- Personality tests and its constructions. Stress: models of stress, stress reaction-physiological and psychological aspects. Situational factors-life events, conflict and trauma. Vulnerability and invulnerability, type-A behaviour theory. Coping mechanism. Locus of control. Relationship of stress with disorders, concept of behavioral medicine. States of consciousness: arousal. Sleep structure and dreaming. Biorhythms and effects of sleep deprivation. Hypnosis and suggestibility, meditation and trances.
- II. *Social Psychology:* Attitudes: Attitude formation and attitude changes Components and measurements of attitude. Cognitive consistency and dissonance. Believe-Attitude-Behavior relationships. Self psychology, self-concepts, self-esteem and self-image. Self-recognition and personal identity. Interpersonal issues: person perception, affiliation and friendship. Attribution theory. Social behaviour in social interactions. Theory of mind and pervasive

developmental disorders. Leadership, social influence, power and obedience: types, characteristics and behaviour of leaders. Types of social power. Influences operating in small and large groups. Conformity, polarization and group thinking. Gang and deindividuation. Communicative control in relationships. Inter-group behaviour: prejudice, stereotypes and inter-group hostility Social identity and group membership. Aggression: theories of aggression. Factors influencing aggression. Family and social background of aggressive individuals. Altruism: social exchange theory and helping relationships. Interpersonal cooperation. Masculinity and femininity: psychology of man and psychology of woman. Psychology of institution/organization. Management consultancy, introduction of system theories.

- III. *Developmental Psychology*: Basic framework for conceptualizing the development: nature and nurture, stage theories, maturational tasks, maturity. Examination of gene-environment interactions. Relative influence of early reasons and later adversities. Impact of specific adversities such as trauma/abuse on development. Historical models - Freud and Neo-Freudians, Social learning, Piaget. Attachment: theories of attachment and its relevance to development. Classification and outcome of attachment. Maternal deprivation and its consequences. Brief consideration of neonatal/infantile-maternal bonding. Adult attachment behaviour. Family: family relationship and parenting practice: Influence of parental attitudes compared with parenting practice. Some aspects of distorted family function e.g. discord, overprotection, rejection, enmeshment, and disengagement. The impact of family factors on subsequent, development of the child. Family structure and influence on development. Temperament: individual temperamental difference and their impact on parent child relationships. Origins, types and stability of temperament and the evolution of character and personality. Childhood vulnerability and protective factors with respect to mental health. Developmental theories. Cognitive development: Piaget's model and its advancement. Hypothesis of intrauterine cognitive development. Language development: basic outline theories with special reference to environmental influences and communicative competence. Social development: social competence, peer relationships. Components of peer popularity and unpopularity, bully victim problems. Moral development: criteria reference to Kohlberg's stage theory. Egocentrism in adolescence. Development and maintenance of fears: in childhood and adolescence with reference to age. Sexual development: factors in the development of sexual identity and preference. Gender role. Adolescence as a developmental phase: Identity formation and role confirmation, and adolescence crisis with special emphasis on works of Bell, Kohut and Erickson. Adulthood: adaptations such as pairing, parenting, illness, bereavement and loss. Job and careers. Conception, pregnancy and childbirth: stresses related with rearing responsibilities, and their implications in the development of infant. Middle age: adaptation to physical change, mid-life crisis. Normal aging: changes of normal aging and its impact on physical, social, cognitive and emotional aspects of individual functioning. Social changes accompanying old age. Stage of bereavement. Disability and pain xvii) Death and dying: adjustment with dying and its phases. Methodology of studying development: cross sectional, cohort and individual studies.
- IV. *Educational Psychology including School Psychology*: Elements of good teaching; characteristics of expert teacher, role of Educational Psychology. Cognition and Language, social and emotional development: Types and principles of development, Theories of development: Piaget and Vygotsky's theories of cognitive development, development of language. Erickson theory of psychosocial development, fostering self-esteem, Kohlberg theory of moral development. Learning abilities and learning diversity: Individual differences and teaching, cognitive and learning styles, students and learning challenges. Mainstreaming and integration. Motivation and classroom learning: Goal and task of learning, autonomy and accomplishment in classroom, cooperation and competition, encouraging motivation and thoughtful learning. Instruction and classroom management and classroom assessment

- V. *Identification and evaluation of influences on development.*
- VI. *Sociology and Anthropology:* Description and terms: Social class, socio-economic status and their relevance to psychiatric disorder and health care delivery. Social role of doctors: Doctor-patient – relationship. Sick role and illness behaviour. Formation of group, clan and family. Family cycle: family factors and psychiatric disorders. Social factors and specific mental health issues: Life events, and their subjective and contextual issues. Sociology of residential institutions. Basic principles of criminology and penology. Culture and its influence on psychiatric disorders. Stigma and prejudice. Ethnicity: types, ethnic minorities. Adoption and mental health. Anthropological studies, methodology, surveys, social anthropological approaches, and ethnography. Interrelationship between professional groups: team formation, patient care. Characteristics of professions. Development of self-sociological and anthropological perspectives
- VII. *Neuropsychology:* Brain organization in relation to memory, language, perception, attention-concentration, Visio-spatial ability and frontal lobe functions.
- VIII. *Psychometrics:* Psychological testing: knowledge about different psycho-logical tests and clinical implications, special emphasis on tests for intelligence, personality and developmental assessments. Neuropsychological testing: application of neuropsychological tests particularly to measure cognitive impairments in organic disorders especially dementia. Comprehensive test batteries and specialized approaches.

### **C. Psychopharmacology:**

- I. General principles: a brief historical review of the development of psychotropic drugs and classification of psychotropics. The principles of rational prescribing of psychotropics. Pharmacokinetics: general principles of absorption, distribution, metabolism and elimination. Comparison of different routes of administration as they affect drug availability, elimination and access to the brain through blood-brain barrier. Relationship between plasma drug level and therapeutic response. Pharmacodynamics: synaptic receptor complexity, subtypes of receptors, phenomenon of receptor up/down regulation. The principal CNS pharmacology of psychotropics with particular attention to their postulated mechanism of action in achieving therapeutic effect at both synaptic, molecular and system levels. These groups mainly include antipsychotics, mood stabilizing agents, antidepressants, anxiolytics, hypnotics, psychostimulants, and antiepileptic agents. Knowledge about advancement of psychotropics. Adverse effects: understanding dose related adverse reactions associated with main groups of drugs used in psychiatry with appropriate corrective action. Evaluation of risks and benefits of psychotropic drugs in acute, short and long term use including effects of withdrawal. Evaluation of drugs: research methodology for drug trials including principles of design, randomization, blindness (double-blind technique), statistical power, duration, rating scales, exclusion criteria.

### **Group-B: Comprehensive Psychiatry:**

#### **a) General Adult Psychiatry:**

- I. Introduction to Psychiatry: concepts of mental illness, criteria of abnormality. Disease, illness and sickness. Different models of defining mental disorders. History of Psychiatry.
- II. Phenomenology and Psychopathology: signs and symptoms of psychiatric disorders. Concept of psychopathology and its approaches, defense mechanism.
- III. Psychiatric assessment: psychiatric interview, interviewing techniques. Multidisciplinary approaches of assessment. Record keeping.
- IV. Classification in psychiatry: history of classification and its needs. Types of classifications-categorical and dimensional. Diagnostic grouping, knowledge of ICD and DSM classifications and diagnostic systems. Cross cultural variation.
- V. Psychiatric epidemiology: cross cultural differences and time trends.
- VI. Aetiology of psychiatric disorders: approaches to aetiology and its development, different



- models and theories. Contribution of biological, psychological and psychodynamic factors to psychiatric aetiology. Importance of multifactorial aetiology.
- VII. Treatment approaches: general approaches of psychiatric treatment including application of multidisciplinary team approaches. Role of psychiatrists in treatment, condition of the various treatment processes involved.
  - VIII. Preventive psychiatry: types of preventive activity -improvement quality of life, activities to differential levels. Preventive approaches to high-risk group. Mental health education.
  - IX. Psychiatric services: different models of service. Liaison approach. General hospital services-inpatient, outpatient and day hospital. Primary care psychiatry and referrals. Mental hospital and its present state. Community psychiatric services. Specialized services such as educational, social and economic rehabilitation. Therapeutic communities and support groups.
  - X. Psychiatric morbidity and its effects on family, society and economy.
  - XI. Aetiology, presentation, clinical course, outcome and prognosis of psychiatric disorders with the special emphasis of the following: Schizophrenia: development of ideas about schizophrenia, epidemiology, aetiology, classification, diagnostic criteria, course and prognosis, treatments. Other psychotic disorders: overview, schizotypal disorders, delusional disorders, acute and transient psychotic disorders, schizoaffective disorders, Psychotic disorder due to general medical conditions. Atypical psychotic disorders, culture-bound psychotic disorders.
  - XII. Mood disorders: depressive disorders - epidemiology, aetiology, classification with different perspectives, clinical presentation and diagnostic criteria, course and prognosis, assessment and management.
  - XIII. Bipolar disorders: epidemiology, aetiology, types, clinical presentation and diagnostic criterion of different episodes, course and prognosis, treatments.
  - XIV. Other mood disorders:
  - XV. Anxiety disorders: overview, normal and pathological anxiety including their aetiology, classification. Specific anxiety disorders including phobic anxiety disorders, OCD, panic disorder, generalized anxiety disorder, anxiety disorder due to general medical conditions, substance induced anxiety disorder, mixed anxiety and depressive disorder.
  - XVI. Stress related disorders: overview, reaction to stress. Acute stress disorder, post-traumatic stress disorder, adjustment disorder, their aetiology, clinical features and diagnosis, course and prognosis and management. Other reaction to stress.
  - XVII. Somatoform disorders: epidemiology, aetiology and types. Detailed knowledge on somatization disorder, undifferentiated somatoform disorder, hypochondriacal disorder, dissociative (conversion) disorders, body dimorphic disorder.
  - XVIII. Other somatoform disorders.
  - XIX. Factitious disorders: overview, epidemiology, clinical features and diagnosis, treatment. Other neurotic disorders: neurasthenia, depersonalization-derealization disorder. Other specific neurotic disorders. Chronic fatigue syndrome. Cardinal psychological features of cerebral disorders: Acute and chronic organic reactions, focal cerebral disorders.
  - XX. Specific disorders: head injury, cerebral tumors, epilepsy, intracranial infections, cerebrovascular disorders, dementias and pseudodementias, delirium and cognitive disorders, vitamin deficiencies, toxic disorders, movement disorders and other disorders affecting the nervous systems. Culture bound syndromes.
  - XXI. Sexuality and gender identity disorders: normal sexuality, psychosexuality, sexual and gender identity and sexual behaviour, normal sexuality, psychosexuality, sexual and gender identity and sexual behaviour. Sexual dysfunctions including sexual desire disorder, sexual arousal disorder, orgasmic disorder with special emphasis on premature ejaculation, Sexual pain disorder - vaginismus, dysperunia.
  - XXII. Substance induced sexual dysfunction; culture bound sexual disorder - Dhat syndrome. Paraphilias. Gender identity disorders - epidemiology, aetiology, description, course and prognosis of transsexualism.
  - XXIII. Sleep disorders: normal sleep patterns, regulation, and function and sleep-wake rhythm. Classification of sleep disorders, dyssomnias, insomnias and hypersomnias. Parasomnias - nightmare disorders, sleep terror disorder, sleep waking disorder. Sleep disorder related to

- another mental disorder. Other sleep disorders including sleep disorders due to general medical conditions, and substance induced sleep disorders.
- XXIV. Impulse control disorders: overview. Impulse control disorders not elsewhere classified, intermittent explosive disorders, pathological gambling, kleptomania, pyromania, Trichotillomania and others.
- XXV. Eating disorders: epidemiology, aetiology, presentation, diagnosis, course, prognosis and treatment of anorexia nervosa, bulimia nervosa and obesity.
- XXVI. Personality disorders: development of abnormal personality, Epidemiology, aetiology, presentation, diagnostic criteria, course, prognosis and treatment of different types of personality disorders with special emphasis on antisocial personality disorder.
- XXVII. Other conditions related to psychiatry and psychiatric disorders: relationship problems, abuse of adult, bereavement, malingering, phase of life problem, age-related cognitive decline, academic and occupational problem, nonadherence to treatment for mental disorder.
- XXVIII. Psychiatric emergencies epidemiology of suicide, deliberate self-harm and its treatment. Organic and functional psychiatric emergencies and their management. Violence and assaultive behavior, their causes and treatment. Emergency psychiatric interview.
- XXIX. Biological therapies:  
Clinical psychopharmacology and therapeutics: basic guidelines of presenting psychotropics including typical and atypical antipsychotics, antidepressants, mood stabilizing agents, sedative-hypnotics for specific psychiatric disorders. Monitoring, management of adverse effects, drug interactions.  
Prescribing psychotropic in general medical conditions: specially in stroke, epilepsy, Parkinson's disease, cardiovascular diseases, hepatic and renal impairment.
- XXX. Electroconvulsive therapy (ECT): mechanism of action, indications, contraindications, clinical guidelines, technique of administrations, adverse effects.
- XXXI. Other biological therapies: light therapy, psychosurgery, chronotherapy, placebo and others.
- XXXII. Psychological therapies:  
General considerations: development and perspectives of psychotherapies and classifications. Indications for the use of counseling and psychotherapy.  
Specific psychotherapy for the management of psychiatric disorders
- XXXIII. Social therapies:  
General considerations: Development of social treatment and community care, major theoretical influences, principles of community care, different methods of social treatments including therapeutic communities and milieu therapy.
- XXXIV. Community psychiatric care: primary care, acute specialized care, long-term care.
- XXXV. Rehabilitation: provision for rehabilitation for psychiatric disorders with special emphasis on schizophrenia, intellectual disability, substance use related disorders.
- XXXVI. Social work: values of social work. Interventions - casework and counseling, working with the family and volunteers, group work. Social work contribution to the multidisciplinary team; collaboration with other agencies; effective collaboration. Evaluation of social treatment and its future.

#### **b) Basic Child and Adolescent Psychiatry**

- I. Introduction to Child and Adolescent Psychiatry: Historical/cultural relations, Epidemiology & prevalence, Classification, Epidemiology - cross cultural,, Ethnic and cultural issues in mental health
- II. Interviewing: with children and adolescents, with parents and family. Approaches of assessment of cases in Child and Adolescent Psychiatry, importance of multiinformant and multisource, assessment of both difficulties and strengths. Physical examination, medical investigations, psychological tests, multiaxial diagnosis.
- III. Aetiology of child psychiatric disorders: genetic influences, chromosomal abnormalities, brain disorders, individual and family factors, social and environmental influences.
- IV. Prevalence, aetiology, presentation, treatments and outcome of clinical syndromes and conditions in child and adolescent psychiatry including pervasive developmental disorders, specific developmental disorders, hyperkinetic disorder, oppositional defiant and conduct disorders, emotional disorders specific to childhood, anxiety disorder, depression,

- somatoform disorder and its variants, stress related disorder, obsessive compulsive disorder, tics disorder, feeding and sleeping disorders, attachment disorders in infancy and childhood. Enuresis and encopresis, school refusal, selective mutism, preschool problems.
- V. Psychiatric aspect of somatic disease & disorders, psychosomatic disorders, epilepsy and psychiatry
  - VI. Family conflict and problems, school and peer factors. Disorders of adolescence, suicide and deliberate self-harm, anorexia and bulimia nervosa, substance use disorders, schizophrenia and allied disorders,
  - VII. Continuities of childhood psychiatric disorders into adult life.
  - VIII. Approaches to treatment: basic range of treatment methods -description, indications and contraindications for different treatment interventions, outcomes. Indications for inpatient and day patient care.
  - IX. Child psychiatric services: general description. Basic information on different agencies involved in the care of children and their functions.

**c) Community Psychiatry:**

- I. Concept of community psychiatry: evolution, historical trend, custodial care, mental hygiene movement, deinstitutionalization, and disease prevention in psychiatry,
- II. Prevention in psychiatry: public health model - primary secondary and tertiary prevention,
- III. Community mental health care services: (please refer to General Adult Psychiatry section. Psychiatric services) Community mental health centers: philosophy, objectives, care facilities, consultation, care of chronically ill and participatory community care.
- IV. Manpower development: development of clinical and para-clinical staff, training, utilization of existing manpower, and peer review of efficiency.
- V. Economics of psychiatry, cost shifting, cost analysis, sources of financing, prospective, payment, insurance, unfavorable provisions for psychiatric patients.

**d) Rehabilitation Psychiatry:**

- I. Provision for rehabilitation for psychiatric disorders with special emphasis on schizophrenia, mental retardation, and substance use related disorders.

**e) Psychotherapy:**

- I. Development of psychotherapy, common factors in psychotherapy.
- II. Psychoanalytic psychotherapy: development of psychoanalytic concepts of Freud, the Neo-Freudians, Anna Freud, Klein and Winnicott. An understanding of classical psychoanalysis and its components. Psychodynamic psychotherapy.
- III. Indications of expressive, brief, long term and supportive psychotherapy.
- IV. Behaviour therapy: development of behaviour therapy, classical and operant conditioning. Dialectic behaviour therapy. Social skill training, assertiveness training. Understanding of systematic desensitization graded and cue exposure, flooding, extinction, token economies and other techniques. Functional analysis of behaviour. Formulate a treatment plan and use measurements to assess changes.
- V. Cognitive therapy: development of cognitive therapy and principles of cognitive treatment. Cognitive model for depression and other non-psychotic disorders. The importance of schemas, negative automatic thoughts and maladaptive assumption. Strategies and techniques of cognitive therapy. Cognitive therapy, Rational-Emotive therapy, Stress-inoculation therapy, Personal Construct therapy, Social Cognitive therapy, Cognitive analytic therapy.
- VI. Humanistic-experiential therapy. Concepts and therapeutic approaches; person –Centered therapy, Existential therapy, Gestalt therapy, Transactional analysis.
- VII. Family therapy: development of family therapy. Understanding of family system and social change, subsystem, family rules, homeostasis, family life cycle framework, genogram. Different models of family therapy: dynamic, structural strategic, systemic, psycho educational and behavioural. Parenting techniques. Goals of treatment.
- VIII. Group therapy: therapeutic factors in groups. Types of groups and group therapy. Understanding mechanisms, techniques of therapy in small and large groups. Inpatients

- group therapy, Therapy groups including self-help groups.
- IX. Special considerations: interpersonal psychotherapy (IPT), counseling. Crisis intervention, multi-systemic therapy, EMDR, meditation, hypnosis, abreaction, psychodrama, Medistic therapy, biofeedback, and computer based psychotherapeutic programme, combined psychotherapy and pharmacotherapy.
  - X. Evaluation of psychotherapy: efficacy, difficulties in defining outcome, understanding of effect, size and meta-analysis, specific and nonspecific effects of psychotherapy.
  - XI. Psychotherapy: science, humanistic, philosophy, religion and spirituality - common elements and differences.
  - XII. Prevention: Definition, types of preventive activity, preventive activities directed towards children at different development levels, preventive approaches to the children in high risk situations.
  - XIII. Treatment for delinquents: General issues; study design and evaluation of programmes, characteristics of delinquents, characteristics of the programme, characteristics of the therapist; nonresidential approach, residential approaches in the community, residential approaches removed from the community.
  - XIV. Group therapy: therapeutic factors in groups. Types of groups and group therapy. Understanding mechanisms, techniques of therapy in small and large groups. Inpatients group therapy, Therapy groups including self-help groups.
  - XV. Special considerations: interpersonal psychotherapy (IPT), counseling. Crisis intervention, multi-systemic therapy, EMDR, meditation, hypnosis, abreaction, psychodrama, biofeedback, and computer based psychotherapeutic programme, combined psychotherapy and pharmacotherapy.
  - XVI. Evaluation of psychotherapy: efficacy, difficulties in defining outcome, understanding of effect, size and meta-analysis, specific and nonspecific effects of psychotherapy.
  - XVII. Psychotherapy: science, humanistic, philosophy, religion and spirituality - common elements and differences.

**f) Substance Misuse Psychiatry:**

- i. Overview: terminology- substance abuse, dependence, withdrawal, intoxication. Classification of disorders associated with the use and abuse of alcohol and other psychoactive substances.
- ii. Epidemiology and basic pharmacology: alcohol, cannabis, the stimulants (amphetamine, cocaine, caffeine, pemoline etc.), hallucinogens, inhalants, nicotine, solvents and nitrites, opiates, phencyclidine, sedatives, hypnotics and other anxiolytics (benzodiazepine and barbiturates).
- iii. Classification, aetiology, presentation and diagnostic criteria, comorbidity, assessment and treatment of substance use related disorders. Personality aspects of drug additions.
- iv. Assessment and management of nonsubstance additive and related syndromes.

**g) Geriatric Psychiatry:**

- i. Old age: neurobiology of aging. Psychology of aging -psychodynamics, cognition and age, importance of loss.
- ii. Socio-economic factors in old age: attitudes status of the elderly, retirement, income, accommodation, socio-cultural differences.
- iii. Psychopharmacology of old age.
- iv. Psychological aspects of physical diseases: particular emphasis on possible psychiatric sequelae of cerebrovascular diseases, renal disease, Parkinson's disease, sensory impairments. Emotional reaction to illness and to chronic ill health.
- v. Mental disorders of old age: special emphasis on dementia disorders, delirium, depressive disorders, schizophrenia, delusional disorders, substance use disorders, sleep disorders, anxiety disorders, bereavement and adjustment disorders.
- vi. Deliberate self-harm and suicide in old age.
- vii. Psychiatric aspects of personality in old age.
- viii. Assessment of a referral in old age. Use of home visits.

- ix. Service provision: principles of service, multidisciplinary work, social services and voluntary agencies. Institutional care of the old, community care, terminal care of the elderly. Hospice concept.
- x. Medico legal issues in geriatric psychiatry: elder abuse. Management of property. Testamentary capacity, driving.

#### **h) Forensic Psychiatry:**

- i. Relationship between crime and psychiatric disorders: knowledge of the range of offences committed by mentally disordered offenders. Specific crime and their psychiatric relevance particularly homicide, other crimes of violence, sex offenses, arson, shoplifting and criminal damage. The relationship between specific illness and crime.
- ii. Psychiatry and the criminal justice system: an outline of the procedure of arrest, prosecution and sentencing. Role of Police in arrest of mentally disordered offenders, the assessment of defendants at police stations, false confessions.
- iii. Facilities and treatment: elements of forensic psychiatric services, their relationship to each other. The use of security in the treatment of psychiatric patients and the arguments for and against seclusion. The long term management of patients on restriction orders. Care in the community for previous violent patients.
- iv. Offending behaviour and its management.
- v. Victims: the psychological sequelae of victimization, especially anxiety states, anger and aggressive behaviour. Compensation and other medico-legal issues.
- vi. Civil matters: Psychiatric disorders and civil rights including marriage, divorce, **custody** of children and management of property and affairs.
- vii. Ethics in psychiatry: ethical principles, professional codes, patient - therapist sexual relationship, informed consent, involuntary treatment, privilege and confidentiality, hospitalization, right to treatment, impaired physicians, physicians in training, claim for psychiatric damage. Abortion.

#### **Paper- II: Liaison Psychiatry**

##### **♣ Group-A: Psychiatry in Medicine & Neuropsychiatry**

##### **♣ Group-B: Psychiatry in Paediatrics**

#### **Group-A: Psychiatry in Medicine & Neuropsychiatry**

##### **a) Psychiatry in Medicine**

- I. Basic understanding of ward dynamics including doctor-patient-nurse-care givers relationship.
- II. Referrals: dynamics, relationship with referrers.
- III. Communications skills.
- IV. Psychiatric assessment of patients with physical illnesses.
- V. Clinical and theoretical aspects of acute and chronic pain and its management.
- VI. Assessment and management of patients who have harmed or threatened to harm themselves.
- VII. Medical treatment, its complications and their management with special emphasis on drug interaction.
- VIII. Theoretical and clinical aspects of psychiatric presentations in physical diseases.
  - I. General medicine relevant to psychiatry. Psychiatric aspect of somatic disease & disorders, psychosomatic disorders,
- IX. Course and management of liver, renal and cardiac disease, diabetes, respiratory disorders, cancer relevant to psychiatry.
- X. Course and management cardiovascular disorders relevant to psychiatry
- XI. Course and management of endocrine and metabolic disorders relevant to psychiatry.
- XII. Course and management gastrointestinal and hepatopancreatic disorders relevant to psychiatry. Recognition and management of medical conditions associated with HIV infection and other STDs including their psychiatric manifestations.

- XIII. Recognition and management of disorder of hemopoietic system including their psychiatric manifestations.
- XIV. Recognition and management of infectious, renal, genitourinary diseases, including their psychiatric manifestations
- XV. Chronic physical diseases, psychiatric sequelae and their management.
- XVI. Terminal illness: management of dying patients and their families.

**b) Neuropsychiatry:**

- I. Clinical knowledge of neurology: physical examination of nervous system, diagnosis, investigation and treatment of common conditions.
- II. Disorders affecting cranial nerves, spinal cord, peripheral nerves and demyelinating diseases.
- III. Infection of the nervous system: bacterial, viral including slow viral diseases.
- IV. Psychiatric consequences and associations of brain diseases, damage and dysfunctions.
- V. Brain degeneration process including degenerative disorders and its psychiatric consequences including organic psychiatric conditions.
- VI. Psychiatric aspects of head injury and stroke and psychiatric conditions associated with them and the rehabilitation strategies.
- VII. Seizure disorders, epilepsy, their management and psychiatric conditions associated with them and the rehabilitative strategies.
- VIII. Neurological disorders presenting as psychiatric problems.
- IX. Specific conditions like headache, migraine, facial pain, neuralgias.
- X. Neuro-imaging techniques: structural and functional imaging including X-ray, CT, MRI, EEG, SPECT, PET, MRS, Fusion imaging.

**Group-B: Psychiatry in Paediatrics**

- i. Introduction to Paediatrics; Ethics in paediatric care
- ii. Clinical knowledge and skills of Paediatrics: physical examination, diagnosis, investigation and treatment of common conditions.
- iii. Understand the different specific and changing health needs of children and adolescents, know about normal and abnormal pubertal development
- iv. Understand the effects of family composition, socio-economic factors and poverty on child health
- v. Growth and Nutrition- child and adolescent health. Protein energy malnutrition, causes, presentation, clinical course, outcome and prognosis. Psychiatric aspect of nutritional disorder.
- vi. Aetiology, presentation, clinical course, outcome and prognosis of disorders like Common infectious disorder, Genetic disorders, Neuro-endocrine disorders, Type-1 Diabetes mellitus and psychiatric consequences.
- vii. Acute glomerular nephritis, Nephrotic syndrome and their relation with psychiatry.
- viii. Psychiatric aspect of chronic paediatric disorder like Epilepsy, Juvenile Rheumatoid arthritis, Rheumatic fever, Childhood asthma, Paediatric malignancies and their impact on child and family and effect of multiple hospitalizations.
- ix. Premature birth, low birth weight baby, birth defects, cerebral palsy,
- x. Features of common chromosomal disorders, congenital malformations, Genetic Syndromes.
- XI. Understand the risks and cultural issues posed by consanguinity
- XII. Care of children and adolescents with burn injuries
- XIII. Care of children with haematological diseases like Thalassemia, Anaemia, Leukaemia, Bleeding disorders
- XIV. Psychiatric disorders presenting as paediatric problems and vice versa.
- XV. Other related psychiatric problems may arise in general paediatrics

**Annexure 1: Clinical Training Rotations:**

Block 1				
Months	1st	2nd	3rd	
Educational Program	<b>General Psychiatry</b> <b>Basic Courses:</b> Behavioral Sciences, Basic Sciences relevant to Psychiatry			E O B A
Clinical Training Rotations	<ul style="list-style-type: none"> <li>Inpatient, Outpatient of Department of Psychiatry</li> <li>Relevant Basic Science departments of BSMMU</li> </ul>			

Block 2				
Months	4th	5th	6th	
Educational Program	<b>General Psychiatry.</b> <b>Basic Courses:</b> Behavioral Sciences, Basic Sciences relevant to Psychiatry			E O B A
Clinical Training Rotations	<ul style="list-style-type: none"> <li>Inpatient, Outpatient of Department of Psychiatry</li> <li>Psychology department, University of Dhaka</li> <li>Adult, Child and Adolescent, Psychotherapy</li> </ul>			

Block 3				
Months	7th	8th	9th	
Educational Program	<b>General Psychiatry.</b> <b>Basic Courses:</b> Behavioral Sciences, Basic Sciences relevant to Psychiatry			E O B A
Clinical Training Rotations	<ul style="list-style-type: none"> <li>Inpatient, Outpatient of Department of Psychiatry</li> <li>Psychology department, University of Dhaka</li> <li>Adult, Forensic and Geriatric Psychiatry, ECT</li> </ul>			

Block 4				
Months	10th	11th	12th	
Educational Program	<b>Liaison Psychiatry</b> :Internal medicine and allied relevant to Psychiatry			E O B A
Clinical Training Rotations	<ul style="list-style-type: none"> <li>Inpatient, Outpatient of Internal Medicine</li> </ul>			

Block 5				
Months	13th	14th	15th	
Educational Program	<b>Liaison Psychiatry</b> :Neuropsychiatry			E O B A
Clinical Training Rotations	Inpatient, Outpatient of Neurology <ul style="list-style-type: none"> <li></li> </ul>			

Block 6				
Months	16th	17th	18th	
Educational Program	<b>Liaison Psychiatry:</b> General paediatrics and allied relevant to child and adolescent psychiatry			E O B A
Clinical Training Rotations	Inpatient, Outpatient Department of Paediatrics			

Block 7			
Months	19th	20th	21st
Educational program	<b>General Psychiatry.</b> <b>Basic Courses:</b> Behavioral Sciences, Basic Sciences relevant to Psychiatry		E O B A
Clinical Training Rotations	<ul style="list-style-type: none"> <li>Inpatient, Outpatient and Psychiatric emergency</li> <li>Placement in Psychotherapy division of the Department of Psychiatry Adult, Forensic, Geriatric, Psychotherapy, ECT</li> </ul>		

Block 8			
Months	22nd	23rd	24th
<b>Eligibility Assessment and Phase A Final Examination</b>			