Residency Program

Doctor of Medicine (MD)

Curriculum (Phase-B)

Child and Adolescent Psychiatry

Faculty of Medicine

Bangabandhu Sheikh Mujib Medical University

Dhaka, Bangladesh

Contents

1. Introduction

1.1. Overview of the Specialty

Child and Adolescent Psychiatry as a specialty deals with mentally disordered patients age below the 18 years that may extend to 25 years. It deals with the assessment, diagnosis and management of psychiatric disorders of children and adolescents. The patients are treated on the basis of bio-psycho-social model. The child and adolescent psychiatrist, in accordance with his/her medical professional responsibilities, occupies a central position in a multidisciplinary team whose members contribute their special competences to the common goal.

Child and adolescent psychiatry is the major specialty in terms of clientele group, distress, impact and burden of the diseases and involvement of the diverse professionals. This specialty needs child and adolescent psychiatrists who conceptualize the whole field and have unique set of knowledge and skills. Both the scientific base and specific skills form the framework of a required educational curriculum.

Child and adolescent Psychiatrists are working now more in community and general hospitals, helping children and young people with both medical and psychiatric problems. Scientific treatment in this field exists and very much effective that can prevent immediate and distant impact in their life. Therefore, child and Adolescent Psychiatry deserve to get sufficient concentration in the postgraduate medical education to improve quality child and adolescent mental health services by making quality child and adolescent - psychiatrists.

1.2. Program Overview:

Child and Adolescent Psychiatry Residency Program:

All the selected Residents in the program will undertake three year intensive Phase training in order to achieve the levels of knowledge, skills and expertise required for their clinical practice in the field of child and adolescent psychiatry. It is a competency-based program emphasizing on meaningful integration and contextualization.

The teaching, learning and assessment of the curriculum are facilitated by the provision of comprehensive, educationally oriented supervision and support, which is provided to all trainees across the program. act and named as resident.

Components for structured training:

A. Working with patients in ward
B. Morning session/ journal club/ topic discussion/ case presentation/ grand round/group discussion/ research related discussion etc.
C. Working in Out Patient Department
D. Encouragement of group learning, self directed learning and sharing session with trainers and other trainees.
E. Ensure of protected study time
F. Community Orientation: sending trainees to different outreach centres community orientation.
G. The training will be assessed regularly and in end-block assessment. Satisfactory performance is required in above components for appearing at the summative assessment.

2. Goals and Objectives

2.1: Overall Goals:

- To prepare child and adolescent psychiatrists who would able to meet and respond to the changing child and adolescent mental healthcare needs and expectation of the society.

- To develop child and adolescent psychiatrists who possess knowledge, skill, and attitudes that will ensure that they are competent to practice child and adolescent psychiatry safely and effectively.
- To ensure that they have appropriate foundation for lifelong learning and further training in their specialty and subspecialties.
- To enrich them with knowledge of research oriented works.
- To help them develop to be critical thinkers and problem solvers when managing child and adolescent mental health problems in the community they serve.
- To guide them how to practice evidence-based medicine in their day to day patient management

2.1. Learning Objectives:

The candidates in the program shall achieve the diverse competencies/objectives are as 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.
- **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.
- **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.

3. Admission Requirements

This shall be according to the general rules of admission of respective faculty of the University. Basic requirements are:

1. Resident who has successfully completed Phase-training and passed Phase-A Final examination are eligible for enrollment in the Phase-B Program.

2. Candidates with FCPS/MD in Psychiatry or equivalent degree recognized by BMDC can be enrolled in Phase-B after appearing before an interview board. They are not required to sit for written test. Original documents must be submitted at the time of interview.

4. Content Outlines

During the entire training period, Residents will receive theoretical knowledge to facilitate their learning in customized fashion. The training is designed to develop both the generic and specialty-specific attributes necessary to practice independently as a consultant Child and Adolescent Psychiatrist. The aim is to trained individuals to provide the highest standard of services to the patients with mental health problems.

In-depth specialty-specific educational and training program in this phase will make the resident competent and prepare them for the specialty qualification. It will provide educational program covering the specialty of pediatrics and its subspecialties, Biostatistics, Research Methodology and Medical Education along with rotation specific clinical training. The residents shall undergo through active and integrated learning process on the above three areas to acquire intended learning outcomes that have been set to achieving the program objectives.

4.1. Knowledge:

- The knowledge of psychiatry includes psychiatric symptoms and syndromes, psychological aspects of medical disorders and psychosocial issues. Psychiatric symptoms, syndromes and their treatment are to be learned in the context of an integrated biological, psychological and social approach.
- Knowledge about--diagnosis, aetiology, comorbidity, complications, management, prevention of Specific conditions like: Intellectual Disabilities, Communication Disorders ,Autism Spectrum Disorder, Attention-Deficit/Hyperactivity Disorder, Specific Learning Disorder, Motor Disorders, Alcohol and Drug Abuse and Dependence, Schizophrenia, Depression and Bipolar Affective Disorder, Post Traumatic Stress Disorder, Acute Stress Disorder and Adjustment Disorder, Anxiety Disorders and Obsessive Compulsive Disorder, Somatic Symptoms Disorder,, Illness Anxiety Disorder and Psychological Factors Affecting Medical Conditions, Eating Disorder, A conceptual understanding and their influence on physical and mental disorders etc.
- Knowledge about Special areas of importance:-
- Recovery – an understanding of recovery principles with people who have mental disorders.
- Pharmacology – Treatments of major and minor mental disorders including side effects of treatment.
- Psychotherapy – Basic Principles of interpersonal and cognitive behavioural psychotherapies and psycho-education in the treatment of mental disorders.
- Rehabilitation – Concepts of long term management of people with long term mental illness.
- Risk Assessment –Recognition and basic management of dangerousness to self or others.
- Ethical Issues – General Principle and their application to psychiatry including confidentiality, competency, informed consent, autonomy and beneficence.
- Legal Issues – Basic knowledge of the Mental Health Act.

4.2. Skills:

Communication Skills:-

- Learn to take a formal psychiatric history including incorporating information from other sources
- Be able to take a drug and alcohol history
- Examine all dimensions of the mental state with the expectation that it will be used regularly in the assessment of patients
- 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
- Appreciate the importance of forming a therapeutic alliance and the role of empathy
- 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 engage and examine a patient whose mental state is such that compulsory treatment under the mental health act may be necessary
- Be able to undertake these tasks in a community or hospital setting
- Use principles of recovery in working with patients and their families
- 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
- Evaluate the role of the personal and social 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.
- Basic prescribing skills especially for psychiatric disorders commonly encountered by non-psychiatrists.
- 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.

4.3. Attitudes (Observed 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

4.4. Expected outcome at the completion of Phase-B:

- 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 child and adolescent 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 child and adolescent 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, parents, caregivers, teachers 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 behavior 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 and caregivers 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
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4.5. Residency Training:

Phase-B residency program consist of three years. The training requirements shall be as follows:

First Year: General Child and Adolescent Psychiatry and Neurodevelomental Child and Adolescent Psychiatry

This is six months training in General Child and Adolescent Psychiatry followed by six months training in Neurodevelomental Child and Adolescent Psychiatry Training placement is in Child & Adolescent Psychiatry wing in the Department of Psychiatry where the trainee is given a role matching his/her seniority and experience.

In the first 6 months, Residents will get training in General Child and Adolescent Psychiatry in the Department of Psychiatry. Residents will also get the opportunity to work in a multidisciplinary team, which includes psychiatric nurses, occupational therapists, recreational therapist, psychologists and social workers, and the trainee should, particularly have the chance to chair clinical meetings and case reviews. Experience gained in General Child and Adolescent Psychiatry must include properly supervised in-patient and outpatient management, with both new and follow-up patients.

In the next 6 months, the residents will learn to mange Intellectual Disability: Clinical (settings):*In-patient units:* admission and assessment, rehabilitation, long-term care, *Community:* out-patients, homes/hostels/group homes, etc., day services, joint work with community teams, educational establishments, clinical (cases): with moderate intellectual disabilities, with severe intellectual disabilities. Communication Disorders, Autism Spectrum Disorders Attention Deficit/Hyperactivity Disorders, Specific Learning Disorders, Motor Disorders. The residents will be expected to be exposed in the training and services relevant to neurodevelopmental psychiatry (other than Department of psychiatry, and hospital and community setting), namely Paediatric Neurology Division of the Department of Paediatrics and Institute of Paediatric Neurodisorder and Autism (IPNA) in BSMMU, National Institute of Neurology, National Institute of Mental Health, National Institute of Child Health, Mother and Child Institute, Special schools/services for Intellectual disability and Autism and other neurodevelopmental disability services in the community where appropriate training deems fit. The period of such exposure/placement and rotation will be decided by the department of psychiatry as per requirement.

In addition, residents will complete part of the General Child and Adolescent Psychiatry and learning module of Neurodevelopmental Child and Adolescent Psychiatry in customized ways in this period.

Second year: Training in General Child and Adolescent Psychiatry
This will be full one year residency training in General Child and Adolescent Psychiatry in the Department of Psychiatry as continuum of the previous training. Experience gained in general CA psychiatry must include properly supervised in-patient and outpatient management, with both new and follow-up patients, and supervised experience of emergencies and 'on call' duties. Resident will work with functionalized teams, of which the supervisor/trainer is a member. During their rotation, a trainee must document experience in all of the below:

- assessment of child and adolescent psychiatric emergencies referred for admission
- assessment and initial treatment of emergency admissions
- day-to-day management of child and adolescent psychiatric in-patients
- participation in regular multidisciplinary case meetings
- prescribing of medication and monitoring of side-effects
- regular participation in psychotherapy case allocation meeting for children and adolescents
- use of basic psychological treatments
- use of the mental health legislation
- assessment of new child and adolescent out-patients
- continuing care of longer-term out-patients
- child and adolescent psychiatric day hospital
- community mental health team-joint assessments in the community with other professionals
- crisis intervention
- domiciliary treatment

In addition, residents will complete learning module of General Child and Adolescent Psychiatry including Transcultural Child and Adolescent Psychiatry and in customized ways in this period.

Third Year: Training in Specialties in Child and Adolescent Psychiatry
This will be 9 months residency training in subspecialties in Child and Adolescent psychiatry in the Department of Psychiatry. Resident will receive training in specialties in Child and Adolescent Psychiatry along with adequate exposure in the deferent facilities. Some placement will be made in other training centers where such specific specialty services exist. For example, Residential, care for orphans, Day care and other residential community care/services for children, Rehabilitation centers for children and adolescents, Juvenile correction centers, Brostal schools, Juvenile justice system, Family Court. The period of such exposure and rotation will be decided by the department of psychiatry as per requirement. Basic contents of the specialty training are as follows:

Substance Misuse Child and Adolescent Psychiatry: Resident will receive appropriate experience in this area. There will be a full-time or part-time placement where a specific service exists for the treatment of alcohol and/or drug dependence.

Forensic Child & Adolescent Psychiatry: Some experience may be gained in general adult psychiatry but a specialist attachment in forensic psychiatry services of the department of psychiatry will be made. Apart from the experience of the provision of psychiatric care in secure settings, it is valuable for trainees to accompany consultants to prisons, hospitals, secure units, remand centres and other establishments. Residents will prepare shadow court reports for discussion with their consultants. Specific instruction is needed in the principles of forensic psychiatry, detailed risk assessment and management, and medico-legal work.

Child and Adolescent Psychotherapy: Communicating with children**,** Behavioural therapy**,** Working with families**,** CCD/CBT clinical aspects/treatment**,** Parent training**,** Art therapy**.** Residents must receive theoretical and practical instruction in a full range of psychotherapeutic treatments for children and adolescents as set out in the curriculum. Residents must gain theoretical knowledge, supervised clinical

experience of various approaches in psychotherapy, and should be familiar with all commonly used treatments. Training will have formal attachment to a specialist psychotherapy unit of the department of psychiatry under supervision of a consultant psychotherapist. There basic requirements are: developing interview skills, psychotherapeutic formulation of psychiatric disorder, a minimum of three short-term cases, each using a different psychotherapeutic model, one long-term individual case, using any model, some experience either of group psychotherapy or couple, family or systemic therapy and parenting. Use of the designed logbook and specific assessment records is essential to ensure that each trainee fulfils the requirements in psychotherapy training during the rotational training scheme.

Infant Psychiatry: Resident will receive exposure and training on the promotion of mental health in infants, toddlers, preschoolers, and their families through the consultation, assessment, and treatment of clinical problems. Resident will achieve experience on strength-based, prevention-focused measures with the aim of early intervention for children in high-risk settings or with clinical problems that can positively impact emotional and behavioral development.

Family Psychiatry: Resident will receive exposure and training on the promotion of dyadic relationship, resolution of interpersonal conflicts among their family member and development of healthy parental attitude through the consultation, assessment, and treatment of clinical problems.

Community Child and Adolescent Psychiatry: Residents will receive training and exposure community child and adolescent psychiatry, particularly in preventing strategies and community child and adolescent mental health care services

Rehabilitation Child and Adolescent Psychiatry: Residents will receive training and exposure in rehabilitation child and adolescent community psychiatry, particularly provision for rehabilitation for child and adolescent psychiatric disorders with special emphasis on intellectual disability, autism, child abuse and neglect. Residents will work with rehabilitation team in the supervised role of child and adolescent psychiatrist.
In addition, residents will complete learning module of Specialties in Psychiatry in customized ways in this period.

4.6. Training rotations:

Total duration: 36 months (33 months for training & last 3 months for exam)

Phase- B consists of 6 Blocks. These Blocks are as follows:

BLOCK	SPECIALITY	DURATION (months)
1	General Child and Adolescent Psychiatry	6
2	Neurodevelopmental Child and Adolescent Psychiatry	6
3	General Child and Adolescent Psychiatry	6
4	General Child and Adolescent Psychiatry	6
5	Specialties in Child and Adolescent Psychiatry	6
6	Specialties in Child and Adolescent Psychiatry & Examination	6

*Of the 6 blocks placement in Child and Adolescent Psychiatry, One Block will be for training in Neurodevelopmental Psychiatry, 3 blocks will be for training in General Child and Adolescent Psychiatry, and the rest 2 blocks for training in Specialties in Child and Adolescent Psychiatry. Last 3 months of 6th block will be kept for eligibility assessment and Phase B Final Examination.

*For residence who directly enters in the Phase-B of the Course, the placement of the Block 2 will be as follows: 3 months in General Paediatrics and 3 months in Neurodevelopmental Psychiatry.

4.7. Educational Program (Academic Modules):

- Child and Adolescent Psychiatry(Emotional disorder, behavioral disorder, disorders extended in adult hood ,disorders onset in childhood and continue beyond the puberty)
- Neurodevelopmental Psychiatry
- Specialties in Child and Adolescent Psychiatry (Prenatal Psychiatry ,Forensic Psychiatry, Acts for Children, Substance Related Disorders)

4.8. Clinical competencies:

The curriculum content covers three brad areas-knowledge, skills and attitude.

Major competency - Assessments

- Establishing and maintaining therapeutic relationships with children, adolescents and families
- Safeguarding Children
- Undertake clinical assessment of children and young people with mental health problems
- Managing Emergencies
- Paediatric Psychopharmacology
- Psychological Therapies in Child and Adolescent Psychiatry
- Assessment and Treatment of Child and Adolescent Neuropsychiatry
- Psychiatric management of children and adolescents with learning disabilities
- Paediatric Liaison
- Working with Networks
- Medico-Legal Aspect of Child & Adolescent Psychiatry
- Inpatient and outpatient Child and Adolescent Psychiatry
- Adolescent Psychiatry
- Substance misuse
- Psychotherapy
- Rehabilitation

Major Competency - Management

- Managing a budget
- Managing risk
- Handling complaints
- Involving service users
- Evidence based practice
- Applying good practice standard
- Monitoring and analyzing outcomes
- Audit

5. 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 became more experienced. Teaching and learning occurs using several methods

that 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 an 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.

6. Record of Training

The evidence requires 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 program, at departmental and inter-departmental meeting and other optional educational events.
- Confirmation (certificates) of attendance at subject based/ skills-training/ instructional courses.
- Recorded attendance at conference 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.

6.1. 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.

6.2. 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.

7. Research

Development of research competencies forms an important part of the Residency program curriculum as they are an essential set of skills for effective clinical practice. Undertaking research helps to develop critical thinking and the ability to review medical literature. Every resident shall carry out work on an assigned research project under the guidance of a recognized supervisor; the project shall be written and submitted in the form of a Thesis.

8. Assessment

The assessment for certification of the MD degree of the University is comprehensive and phase-centered attempting to identify attributes expected of specialists for independent practice and life long learning. The assessment consists of two parts -Formative Assessment and Summative Assessment

8.1. Formative Assessment:

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

completion examinations).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 faculty's teaching/learning strategies to ensure formative lesson/training outcomes.
- **Periodic type 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.

8.1.1 End of Block Assessment (EBA):

This End Block Assessment will be conducted by the Department of Psychiatry. It consists of both written and clinical/practical evaluation. The written examination will be short answer questions (SAQ), Structured Clinical Assessment (SCA), medical record review and logbook assessment. Unsatisfactory block training must be satisfactorily completed by undergoing further training for the block to be eligible for appearing phase completion examination.

8.1.2. Formative assessment for Academic modules for Biostatistics and Research Methodology and Medical Education is done in the first nine months of Phase-B training. Residents getting unsatisfactory grade must achieve satisfactory grade by appearing the re-evaluation examination before sitting for Phase-B Final Examination for certification.

8.2. Summative Assessment:

Summative assessment will be named as Phase–B Final Examination. The Phase-B Final Examination is considered as the exit examination. Before appearing the examination candidates must have to complete Phase-B residency training along with successful completion of the all components of formative assessment. Assessment will be done in two broad compartments.

a) Compartment-A:

The examination consists of four components:-

i) Written Examination: consisting of two papers: Total Marks-200

Paper-I: General Child and Adolescent Psychiatry: Marks-100 (3 hours, 15 questions)
Group A: 10 short answer questions (SAQ); 5 marks for eachX10=50 marks
Group B: 5 Scenario based problem solving questions: 10 marks for eachX5=50 marks

Paper-II: Specialties in Child and Adolescent Psychiatry Marks-100 (3 hours, 20 questions)
Group A: 10 short answer questions (SAQ):5 marks for eachX10=50 marks
Group B: 5 Scenario based problem solving questions: 10 marks for eachX5=50 marks

The content for each written paper are specified in the Syllabus section.

SAQ is based on theory and practice in child and adolescent psychiatry. Tables and/or diagrams may be used wherever necessary in order to improve the quality of written script. The candidate is expected to communicate clearly, present arguments coherently, evaluate evidence and make balanced judgments. All of the groups of short questions should be answered. Some questions will relate to either theory or clinical themes. All the questions may be in integrated form to assess a single topic.

Scenario based problem solving questions is focused to assess cases and the of handing clinical problem independently and comprehensively as a specialist in child and adolescent psychiatry. Structure of the suggested format could be:-

- A scenario followed by question(s).
- Question may include diagnosis, differential diagnosis, investigation plan, treatment, prognosis, follow-up, assessment, management, and patient education etc.

ii) Clinical Examination: Mark-200

Observed Long case: Marks-100.
One long case, case taking 30 min; crossing 20 min, each candidate will be examined by two examiners
Short cases: Marks-100

Four short cases: examination and crossing; total time 20-30 minutes, each candidate will be examined by two examiners

iii) Structured Clinical Examination (SCA): Marks-100
10 Stations, 5 minutes for each station:

iv) Oral Examination: marks -100
One board with 2 members, one must be external; 20 minutes (9 minutes for each Examiner and 2 minutes for decision of examiners).

Every Resident must pass all the four components of compartment-A separately. Candidates will be declared fail if he/she fails in one or more components of the examination. He/she then have to be appearing all the four components in the next Phase Final Examination.

b) Compartment-B: The examination consists of: Thesis Examination - Thesis and Thesis defense

Table of the Contents and marks of the Final Phase B Examinations

Written examination		
Paper and Name of subject	Total Marks	Pass marks
a) Compartment-A: i)Written Examination: Paper I: : General Child and Adolescent Psychiatry Group A: 10 short answer questions (SAQ) Group B: 5 Scenario based problem solving questions	Total marks-100	60
Paper-II: Specialties in Child and Adolescent Psychiatry Group A: 10 short answer questions (SAQ) Group B: 5 Scenario based problem solving questions	Total marks-100	60
ii) Clinical examination of Phase-B:	**Total marks**	**Pass marks**
iii) Structured Clinical Examination (SCA) iv) Oral Examination	Total marks-100 10 Stations (10 marks and 5 minutes for each Total marks-100	60 60

b) Compartment-B Thesis Examination (Thesis Defense and Comprehensive Viva)	Thesis Writing 200 Defense 100	120 60

8.2.1 Examination Board

The clinical examination shall be conducted by the examination board duly appointed by the University on the recommendation of the Faculty of Medicine. The board consists of four members (Associate Professor and above) to conduct the examination from the discipline of Child and Adolescent Psychiatry. Among four examiners, two will act as internals (from the Departments of Psychiatry, BSMMU) and two will act as externals (from any institute other than BSMMU). Oral examination will be taken by one board consisting of 2 examiners. The Convener of this examination board shall be from the Department of Psychiatry of BSMMU.

8.3 Thesis Evaluation:

To be evaluated by three evaluators and two evaluators should be subject specialist and one academician involve in research and teaching research methodology. Among subject specialist one should be external. Supervisor will attend the defense as an observer and may interact only when requested by the evaluators. Evaluators shall be in rank of Professor/associated Professor. Thesis must be submitted to the controller of examination not later than 27 months of enrolment in Phase-B. Thesis must be sent to the evaluators two weeks prior to assessment date. Evaluation will cover Thesis writing and defense. For thesis writing evaluator will mark on its structure, content, flow, scientific value, cohesion etc. For Thesis defense, Candidate is expected to defend, justify and relate the work and its finding. Residents must submit and appear Thesis defense at notified date and time. However, nor-acceptance of the thesis does not bar the resident in appearing the written, clinical and oral examinations. The total marks: 300; Thesis writing 200 and thesis defense 100 marks and Pass mark—60%.Assessment must be completed in next 3 months. Outcome of assessment shall be in 4 categories: 'Accepted', 'Accepted with minor correction', 'Accepted with major correction' and 'Not Accepted'. Description of theses terns are as per Residency Program management rules of the University..

Pass Mark

Each successful candidate shall be granted MD Degree if he/she successfully passes in all the examinations of Phase-A or Phase-B and defend thesis successfully. If a successful candidate secures 75% or more of the marks in the aggregate in the final examinations he/she shall be declared to have passed with honors in the subject of examination, provided he/she passed Phase-A and Phase-B examinations regularly.

Failure

A resident who fails in Phase-B examination may reappear in the subsequent examination according to the rules of the University. A candidate passing in paper(s) in Phase-B examination will not be required to appear in the same paper(s) in a subsequent examination while reappearing in Phase-B examination. If

any candidate fails in one compartment he/she will appear in that compartment in the subsequent Phase-B examination.

8.3.1 Description and terms:

- **Accepted:** Assessors will sign the document and resident will bound it and submit to the Examination Department by 7 days.
- **Accepted with minor correction:** Minor correction shall include small inclusion/exclusion of section, identified missing references, correction of references and typographical and language problem. To be corrected and submitted within 2 (two) weeks.
- **Accepted with major correction:** Task is completed as per protocol with acceptable method but some re-analysis of result and corresponding discussion are to be modified. To be corrected and confirmed by Supervisor and submitted within 3 (three) weeks.
- **Not Accepted:** When work is not done as per protocol or method was faulty or requires further inclusion or confirmation of study.
- To complete the suggested deficiencies and reappear in defense examination during its next Phase Final Examination.
- Candidate has to submit his/her thesis and sit for examination and pay usual examination fees for the examination.

8.3.2. Residents must submit and appear Thesis defense at notified date and time. However nor-acceptance of the Thesis does not bar the resident in appearing the written, clinical and oral exam.

8.4. Qualifying for MD/MS Degree:

On passing both the compartments, the candidate will be conferred the degree of MD/MS in the respective discipline. If any candidate fails in one compartment he/she will appear in that compartment only in the subsequent Phase-B exam.

9. Supervision and Training Monitoring

Training should incorporate the principle of gradually increasing responsibility and provide each trainee with a sufficient scope; volume and variety of experience in a range of setting that include inpatient, outpatient, emergency and intensive care. All elements of work in training rotation must be supervised with the level of supervision varying depending on the experience of the trainee and the clinical exposure. Outpatient and referral supervision must be routinely including opportunity to personally discuss all cases. As training progress the trainee should have the opportunity for increasing autonomy, consistent with safe and effective care for the patient. Trainee will at all time have a named Supervisor, responsible for overseeing their education.

Supervisor - are responsible for supervision of learning throughout the programme to ensure patient and laboratory safety, service delivery as well as the progress of the resident with learning and performances. They set the lesson plans based on the curriculum, undertake appraisal, review progress against the curriculum, give feedback on both formative and summative assessments as well as sign the logbook and portfolio. The residents are made aware of their limitations and are encouraged to seek advice and receive help at all times.

Course Coordinator –of each department coordinates all training and academic activities of the program in collaboration with the Course Manager.

Course Manager - collaborates Course Coordinator of the department to coordinates all training and academic activities of the program.

Course Director – of each faculty directs guides and manages curricular activities under his/her jurisdiction/authority 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

Supervisors and Residents both are expected to have a good knowledge of the curriculum and should use it as a guide for their training program. Since Psychiatry 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 Psychiatry and educational theory and practices. Supervisors are encouraged to discuss the curriculum and to feedback on content and issue regarding implementation at Residency Course Director. Review will be time tabled to occur annually for any minor changes to the curriculum. The curriculum will be reviewed with input from the different Subspecialties of Psychiatry

11. The Syllabus (Detailed Content of Learning)

Below is the basic guideline of the contents of Phase-B MD Residency program 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 Child and Adolescent Psychiatry

a) Basic Child and Adolescent Psychiatry:

I. Reviewing approaches of classification and epidemiology of child and adolescent psychiatric disorders including cross cultural issues.

II. Principles of Assessment: History taking – general principles; Child development – a paediatric assessment, Neuro-psychiatric assessment, Family assessment – psychiatric perspective, Family assessment – family therapist perspective, Structural assessment, Underlying principles of educational assessment, Principles of psychometric assessment.

III. Aetiology of child and adolescent psychiatric disorders: Aetiological Influences: understanding of aetiological influences and the current evidence base and future directions. genetic influence - gene environment interaction, chromosomal abnormalities, brain disorders including cerebral palsy, individual and family influences, clinical aspects of attachment, child abuse, maltreatment of children, mentally ill parents, risk and resilience/reactions to adversity, Sensory impairment, disorders of language

IV. Prevalence, aetiology, presentation, treatments and outcome of clinical syndromes and conditions in child and adolescent psychiatry including:

- Emotional disorders with onset and specific to childhood or adolescence
- Anxiety disorder include Separation anxiety disorder, selective mutism, Specific phobia, Social anxiety disorder, Panic disorder, Agoraphobia, Generalized anxiety disorder, Substance/Medication induced anxiety disorder, Anxiety disorder due to another medical condition, Other specific anxiety disorder, Unspecified anxiety disorder
- Obsessive compulsive and related disorders includes Obsessive compulsive disorder, body dysmorphic disorder, hoarding disorder, Tichotillomania,Excoriation disorder, Other obsessive compulsive and related disorder
- Trauma and stress related disorder includes Reactive attachment disorder, Disinhibited social engagement disorder, Posttraumatic stress disorder, Acute stress disorder, adjustment disorder, Other Trauma and stress related disorder
- Dissociative disorders include Dissociative identity disorder, Dissociative amnesia, Depersonalization/Derealization disorder, Other specific dissociative disorder, Unspecified dissociative disorder

- Somatic symptoms and related disorders: Somatic symptoms disorder, Illness anxiety disorder, conversion disorder, Psychological factors affecting other medical condition, Factitious disorder including factitious disorder imposed on another(Munchausen syndrome by proxy), Other specified somatic symptoms and related disorders, Unspecified somatic symptoms and related disorders
- Gender dysphoria in children, other specified gender dysphoria, specified gender dysphoria
- Disruptive, Impulse-control, and conduct disorder includes Oppositional defiant disorder, Intermittent explosive disorder and conduct disorders , Pyromania, Kleptomania, Mixed disorders of conduct and emotions, Other Specific Disruptive, Impulse-control, and Conduct disorder with onset usually occurring in childhood or adolescence.
- Schizophrenia spectrum and other psychotic disorder during childhood and adolescence: Concept of first episode psychosis. Brief psychotic disorder, schizopreniform disorder, Schizophrenia (early onset and very early onset), schizoaffective disorder, Delusional disorders, substance induced psychotic disorder, psychotic disorder due to another medical, condition,
- Bipolar and related disorder: Concept of paediatric bipolar disorder. Bipolar I disorder, bipolar II disorder, Cyclothymic disorder, substance/medication induced bipolar and related disorder, Bipolar and related disorder due to another medical condition, Other Bipolar and related disorder:
- Depressive disorder: concept of childhood and adolescence depression, Disruptive mood dysregulation disorder, major depressive disorder, Persistent depressive disorder(dysthymia), Premenstrual dysphoric disorder, Depressive disorder due to another medical condition, Other specific depressive disorder, Unspecified depressive disorder
- Conditions that may leads to personality disorders, enduring personality changes, not attributable to brain damage and disease,
- Conditions may leads to Behavioural disorder: Behavioral disorders associated with sexual development and orientation, Unspecified mental disorder and problems falling short of criteria for any specified mental disorder.
- School refusal; its cause, assessment and management
- Adolescent crisis :normal and pathological: psychopathology, aetiology management
- Suicide and self harm among children and adolescence: etiology, assessment management and prevention
- Child abuse and neglect: Physical abuse, Sexual abuse, Psychological/emotional abuse, Child neglect
- Aggression & delinquency
- Sexual deviance
- Bully-victim problem

V. 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,

VI. Continuities of childhood psychiatric disorders into adult life.

VII. Other Adult psychiatric disorders onset during childhood.

VIII. Associated abnormal psychosocial and environmental condition: Abnormal intrafamilial relationships, Mental disorder, deviance or disability or other problems related to child's primary support group, Inadequate or distorted intrafamilial communication, Abnormal qualities/problems related to upbringing, Abnormal immediate environment, Acute life events, Societal stressors, Chronic interpersonal stress associated with school/work, Stressful events/situations resulting from child's own disorder/disability.

IX. Global assessment of psychosocial disability: Measures of disability; WHO Disability assessment schedule (WHODAS).

X. Therapeutic Approaches: General principles when engaging children and families and session on specific treatment approaches. Approaches to treatment: basic range of treatment methods - description, indications and contraindications for different treatment interventions, outcomes; indications for in patient and day patient care. The evidence base for medical therapies.

Communicating with children, Psychological therapies, working with families clinical aspects/treatment, parent training, art therapy, drug treatments, clinical trials

I. Biological therapies: Drugs: Paediatric Psychopharmacology, ECT and its indication of in child and adolescent psychiatric conditions. Other biological therapies for the management of child and adolescent psychiatric disorder
II. Psychological therapies: Specific psychotherapy for the management of psychiatric disorders in children and adolescents (refer to Child and adolescent Psychotherapy section)).
III. Provision for Social therapies and rehabilitation for child and adolescent psychiatric disorders, Child and Family Social work
IV. Child and adolescent psychiatric service development: General description. Basic information on different agencies involved in the care of children and their functions. Skills and processes needed for service development. Evaluation of services, evaluation of treatment, forensic issues, training and teaching skills, service planning

b)Transcultural Child and Adolescent Psychiatry

I. Brain, culture and development; Ethnography and child &adolescent psychiatry-developmental challenges in cultural aspects.
II. Cultural influence in child and adolescent psychiatric disorder; influential factors including child rearing, myth, stigma, parental attitude-and child's behabiour relationship, social permissiveness, cultural inheritance etc. Effect of stigma on mental and physical health in children and adolescents; antistigma strategies
III. Culture and conflict in child and adolescent mental health; military conflict, political turmoil, migration
IV. Transgenerational parent-child transmission of mental health problems with emphasis on parental stress and post-traumatic stress disorder
V. Children and their parents in changing world: globalization and transcultural issues related to children and adolescents
VI. Cross cultural issues in child psychiatric epidemiology including culturally sound measures of psychopathology. Culture specific risk and resilient factors
VII. Cultural variation of distribution of child and adolescent psychiatric disorder and their presentations. Cultural aspects of specific child and adolescent psychiatric disorder with special reference to conversion disorder, depressive disorder, obsessive compulsive disorder. Somatization behaviour in somatic symptoms disorder, anxiety and depression
VIII. Cultural concepts of child and adolescent psychiatric distress/disorder: psychopathology, assessment treatment and prevention; Psychotic hysteria, Mass dissociation and other types of mass hysteria, "Jinn" possession and similar type of possession state, Group Self harm, Dhat syndrome.
IX. Pathoplastic factors in course, outcome and prognosis of child and adolescent psychiatric disorders.
X. Psychiatric disorders in minor ethnic child and adolescent populations.
XI. Culture influence and culture appropriate assessment and treatment modalities of child and adolescent psychiatric disorders: modification of treatment including psychosocial therapy, Importance of development of modified and innovative treatment module.
XII. Competencies of a child and adolescent psychiatrist in transcultural context: acquisition of required knowledge skills and attitude; transcultural perspective of training in child and adolescent psychiatry
XIII. Management, intervention and service innovation in cultural context: setting up mental health care programme with children and adolescents to combat culture specific issues, different conflicts, stress and crisis
XIV. Cultural perspective of child and adolescent psychiatry research.

c) Community Child and Adolescent Psychiatry

I. Community psychiatry for children and adolescent : evolution, historical trend, custodial care, mental hygiene movement, deinstitutionalization, and disease prevention in psychiatry,
II. Prevention in child and adolescent psychiatry: public health model - primary secondary and tertiary prevention,
III. Community child and adolescent mental health care services: Child and Family Consultation 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.
VI. Group home, parenting, policing, schooling, transplantation programme, ambulatory behavioural health care
VII. Disaster intervention and disaster mobilization
VIII. Communication and media

d) Rehabilitation Child and Adolescent Psychiatry:

I. Provision for rehabilitation for child and adolescent psychiatric disorders with special emphasis on intellectual disability, autism and other neorodevelopmental disorder, and substance use related disorders. Progressive neurocognitive disorder
II. Fostering and adoption
III. Rehabilitative approaches in paediatric somatization, child abuse and neglect, nonorganic failure to thrive
IV. Rehabilitation team and role of child and adolescent psychiatrist
V. Child and adolescent rehabilitation act, Child and adolescence psychiatry and National Disability Act.

Paper-II: Specialties in Child and Adolescent Psychiatry

a) Neurodevelopmental Child and Adolescent Psychiatry

I. Recapitulation of Liaison Psychiatry (Psychiatry in Padeatrics,Psychiatry in Medicinbe, Psychiatry in Neurolgy) as mentioned in Phase A Curriculum.
II. Infection of the nervous system: bacterial, viral including slow viral diseases and their psychiatric consequences and associations of brain diseases, damage and dysfunctions.
III. Seizure disorders, epilepsy, their management and psychiatric conditions associated with them and the rehabilitative strategies.
IV. Pathological development of the brain and body of children considering normal physical including brain development, and multidimensional development as a whole.
V. Psychiatric disorders in children and adolescents considering neurodevelopmental perspectives:
VI. Aetiology, presentation, clinical course, outcome and prognosis of Neurodevelopmental disorders:
    - Intellectual disabilities: Nosological evolution and present nomenclature. Classification, epidemiology, aetiology(Genetic, perinetal and acquired factors), clinical features, diagnosis, assessment(psychiatric interview, physical examination, neurological examination, laboratory tests, hearing and speech evaluation, psychological assessment), comorbid psychopathology, treatment and prevention. History and development of Intellectual disability services. Multidisciplinary team approach and role of child and adolescent psychiatrist, Learning disability psychiatrist and general psychiatrist in the team. Liaison among educational, health and social agencies. Special education and community services for learning disabilities. Intellectual Disability Act .Pension with Intellectual Disability Act in Bangladesh.
    - Communication disorders: Language disorder, Speech sound disorder, Childhood-onset

fluency disorder(Stuttering),Social(Pragmatic0 communication disorder, Unspecified communication disorder

- Autism spectrum disorders,
- Attention deficit/hyperactivity disorder
- Specific learning disorder
- Motor disorders, includes Developmental coordination disorder, Tourette's disorder, Persistence motor or vocal tic disorder, other tic disorder and other neurodevelopmental disorders.
- Feeding and Eating Disorders include Pica, Rumination disorder, Avoidant/restrictive food intake disorder, anorexia nervosa, Binge-eating disorder, Other Feeding and eating disorders.
- Elimination disorders include Enuresis, Encopresis, Other elimination disorders
- Sleep-wake disorder includes Insomnia disorder, Hypersomnia disorder, narcolepsy,breathing-realated sleep disorders, Parasonias other sleep related disorder
-

iv . Brain disorder in its impact on child and adolescent mental health

v. Nonorganic failure to thrive

b) Child and Adolescent Psychotherapy:

I. The roots of child and adolescent psychotherapy. The art and science of psychotherapeutic intervention with children and young people

II. Emotional development; Contribution of theories in understanding child and adolescent psychotherapy-psychoanalytic(Freudian and neo-Freudians), classical and operant conditioning, social learning, cognitive

III. Approaches of child and adolescent psychotherapeutic practices: the therapeutic relationship and process ; intercultural issues

IV. The child and adolescent psychotherapy and family :the family context: the place of consultation with parents and therapy of parents in child psychotherapy practice; therapeutic setting

V. Research in child and adolescent psychotherapy.

VI. Different therapeutic environments for child and adolescent psychotherapy---in hospital setting in community setup. Residential care, therapeutic community

VII. The diversity of psychotherapeutic treatments

VIII. Intensive and Non-intensive psychotherapy, brief, long term and supportive psychotherapy and therapeutic consultation.

IX. Psychodynamic psychotherapy: Klienian , Anna Freudian , play therapy based on these principles

X. Behaviour therapy: assessment: Functional analysis of behiviour - ABC analysis and other ways, fixing goal by negotiating with parents and young people. Behavioural Techniques: positive reinforcement, negative reinforcement, skill training with rehearsal and role play, stimulus change, extinction, differential reinforcement, punishment, time out, response cost, overcorrection. Relaxation therapy, exposure with response prevention (ERP), desensitization procedures, extinction. Principle and techniques of implementation of behaviour therapy, evaluation of behaviorally-based therapies.

XI. Cognitive Therapy: techniques of cogitative therapy for adolescents. Cognitive therapy, Rational-Emotive therapy, Stress-inoculation therapy, Personal Construct therapy, Social Cognitive therapy

XII. Cognitive-behavioural therapy: Linking developmental and emotional elements into child and family cognitive-behaviuoral therapy. The basic view of cognitive-behavioural therapy for children, developmental consideration of cognitive-behavioral therapy of children and role of emotion in this therapy. Cognitive-behavioural therapy strategies for parents of pre-school children.
Cognitive approaches to specific child and adolescent psychiatric disorders;
Cognitive behavioursal therapy for attention-deficit hyperactivity disorder, childhood obsessive-compulsive disorder, anxiety disorders, conduct disorders in young children, children with learning difficulties and their parents, post-traumatic stress disorders, pain in childhood,

adolescent depression, aggressive children and adolescents, adolescent conduct disorders, interpersonal problems, substance misuse in young people, eating disorders and obesity
Ethical and related issues and effectiveness of cognitive-behaviuoral therapy
Social problem solving skill programmes

XIII. Interpersonal therapy(IPT), individual counseling and psychotherapy support and counseling

XIV. Family therapy: development of family therapy. Healthy family and family development, Different models of family therapy: psychodynamic, experiential. structural, strategic, systemic, psycho educational and behavioural and group. Overlapping between family therapeutic techniques. Parenting techniques, parent management training.
Assessing families-models for the assessment of families, structural approach to assessing families, triaxial scheme, circumflex model, Beavers model, practical aspects of the assessment of families. Establishing treatment goals. Indications and contraindications of family therapy, practical points in the treatment of families in treating psychiatric disorders of children and adolescents. Common family problems related to child and adolescent mental health problems and their treatment. Evaluation of family therapy

XV. Group therapy: techniques of group therapy for children and adolescents 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.

XVI. 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.

XVII. Suicide prevention programmes for children and adolescents-Staff training approaches, Health education, supportive psychotherapy, Cognitive analytic therapy(CAT), family intervention for suicide programme, (FSP), Dialectic behaviour therapy, Multisystemic therapy(MST), Group therapy-Mentalization based therapy(MBT), Developmental group psychotherapy, Problem solving therapy,

XVIII. Special considerations: Relaxation techniques, Crisis intervention, multi-systemic therapy, EMDR, meditation, hypnosis, abreaction, psychodrama, biofeedback, and computer based psychotherapeutic programme, combined psychotherapy and pharmacotherapy

XIX. Social Work in child psychiatry setting: Intervention, Social work and legal frame work, working in a multidisciplinary team, research and evaluation.

c) Substance Misuse Child and Adolescent Psychiatry:

i. Epidemiology of substance related and addictive disorder among children and adolescents and associated psychosocial factors. Cormorbiidity with conduct and other child and adolescent disorders

ii. Phenomenology related to substance use disorder among children and adolescents

iii. Mental and behavioral disorders due to psychoactive substance use like alcohol, opioids ,cannabinoids, sedatives or hypnotics, cocaine, caffeine and other stimulants, hallucinogens
Non-substance Related disorder; Gambling, Cyber spacing and online addiction in adolescence Internet dependence and related cyber problems unspecified behavioral syndromes associated with physiological disturbances and physical factors.

iv. Culture related assessment and diagnostic issues of Substance related disorders in children and adolescents.

v. The interaction of substance and alcohol use with psychiatric disorders. Substance induced psychiatric disorders among children adolescents. Relationship between substance use and delinquent behaviour.

vi. Strategies for prevention of substance abuse. Role of different agencies. Drug control act and regulations.

vii. Arguments for and against the various types of prescribing and treatment modalities.

viii. Substance misuse related medical, psychiatric and social complications and their impact on public health.

ix. Social reintegration and rehabilitation substance use disorder among children and adolescents

d) Forensic Child and Adolescent Psychiatry:

i. Child and Adolescent Psychiatry and the judicial system: Juvenile justice system and family justice system
ii. Advantages of judicial approaches, disadvantages of the judicial approach, the medical role in the management of delinquency, diversion from the court, an outline of the procedure of arrest, prosecution and sentencing. Role of Police in arrest of Juvenile delinquent, the assessment of defendants at police stations, false confessions.
iii. Psychiatry and the courts: witness of fact, expert witness, writing reports, giving evidence, principles of assuring a defendant for the court and preparing psychiatric court report in a criminal case.
iv. 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.
v. Offending behavior and its management; correction centers,, Brostal school and other fasciitis
vi. Dangerousness: concept, definitions and situations where assessment is required.
vii. Predictions of juvenile crime and problems related to predictions.
viii. Psychiatry in prisons: prevalence of psychiatric disorders in young people prison populations, suicide in prisoners, psychiatric treatment in prison settings.
ix. Victims: the psychological sequelae of victimization, especially anxiety states, anger and aggressive behavior. Compensation and other medico-legal issues.
x. Cyber –Space problems and crime- sexual exploitations and related emotional and behavioural problems
xi. Child and adolescent Psychiatric disorder and law. UN Convention on the rights of the children, Child Protection Act and related rules and convention
xii. Legal aspects of child care: child protection, child abuse. Rights of the children adolescents. Role of the psychiatrist.
xiii. Forensic child and adolescent psychiatric services in hospital and community. Liaison between agencies

e) Infant Psychiatry

I) Promotion of mental health in infants, toddlers, preschoolers, and their families through the consultation, assessment, and treatment of clinical problems.
II) Early intervention for children in high-risk settings or with clinical problems can positively impact emotional and behavioral development.
III) Aetiology, presentation, treatments and outcome of clinical syndromes and conditions in Infant psychiatry including Infantile stranger anxiety, Infantile separation anxiety, attachment disorder
IV) Understanding of infant IQ model
V) Perinatal Psychiatry relevant to infant mental health and infant risk. Fetal Alcohol Syndrome, impact of HIV, Viral infection (influenza, mumps, rubella slow viral), prenatal substance abuse of mother, Psychiatric emergency of mother.
VI) Nonorganic failure to thrive-impact, management and prevention

f) Family Psychiatry:

i) Promotion of dyadic relationship, resolution of interpersonal conflicts among their family member
ii) Development of healthy parental attitude through the consultation, assessment, and treatment of clinical problems.
iii) Children and domestic violence; immediate and long-term impact of dowry, divorce and other family stressors
iv) Impact on children due to parental leave---working mother, father lives abroad for job, leaving of either parent for migration
v) Family support programme

10.1 Academic curriculum of Generic Skills, Medical Statistics, Research Methodology and Medical Education

a) Generic Skills: as per learning module of the respective department.

b) Medical Statistics:

Basic concepts: definition, importance, uses in medical science and limitations, Concepts of scale of measurement, sampling methods, frequency and probability distributions, summary statistics and graphs, tables, outlines, plots Types of data - categorical, ordinal, continuous. Descriptive and inferential statistics: tests of significance, non-parametric and parametric tests, estimation and confidence intervals. The advantage of confidence intervals over p values. Specific tests: t-test. Chi-square test, Mann-Whitney U, confidence intervals for difference between means proportions, mode, medians. Brief introduction of other methods, factor and cluster analysis. Ideas of reliability and validity. Sensitivity, specificity and predictive values of research measures. Bias, particularly-cross-cultural biases. Diagnostic agreement measured by kappa and intra-class correlation. Data analysis: inputting, editing, listing, exploring and analyzing data. Presenting results, Inferring the cause and effect relationship, Confounding factors. Analyses: meta analysis, survival analysis, analysis of covariance, regression and correlation. Research methodology: Candidates should be able critically to examine the design, methodology, results and appraisal of published research, with reference to following areas: Principles and criteria for literature reviews, meta-analysis, Concepts of incidence, Prevalence and population at risk, z test. Sampling techniques, case identification, and case registers mortality and morbidity statistics, Measurements in psychiatry, their advantages and limitation. Research methodology, study design, generation of hypothesis, hypothesis testing, and designing research proposals (type of research study will emphasize on epidemiological surveys and clinical trials and Data analysis and statistics).

c) Research Methodology:

- Residents should be able critically to examine the design, methodology, results and appraisal of published research, with reference to following areas:
- Principles and criteria for literature reviews, Meta - analysis, concepts of incidence, prevalence and population at risk.
- Sampling techniques, case identification, and case registers mortality and morbidity statistics.
- Measurements in psychiatry, their advantages and limitation.
- Research methodology, study design, generation of hypothesis, hypothesis testing, and designing research proposals (type of research study will emphasize on epidemiological surveys and clinical trials).
- Data analysis and statistics to obtain a basic understanding of statistical approaches used in research.
- Introduction to electronic databases
- Introduction to methodological approaches
- Research and assessment scales in child and adolescent psychiatry

In addition, Residents have to do an original research work relevant to psychiatry. For this purpose, they have to complete the followings:

d) Medical education

These will be covered in the first 9 months of Phase B. Courses will be conducted in modular format organized by the respective department in collaboration with the Basic Science Faculty. The assessment will be done as part of formative assessment and will be held jointly by teaching staff offering the course. Residents failing to achieve satisfactory level shall have another three months to recover.

10.2. Immunology and Genetics:

To be covered throughout the 33 months in appropriate clinical context. Formative and summative assessment will be taken along with clinical curriculum

Annexure 1: Clinical Training Rotations:

<table>
<tr><td colspan="8">Block 1</td></tr>
<tr><td>Months</td><td>1st</td><td>2nd</td><td>3rd</td><td>4th</td><td>5th</td><td colspan="2">6th</td></tr>
<tr><td>Educational Program</td><td colspan="5">General Child and Adolescent Psychiatry

Basic Courses: Biostatistics, Research Methodology, Basic of Medical Education</td><td rowspan="3">E
O
B
A</td></tr>
<tr><td>Clinical Training Rotations</td><td colspan="5">• Inpatient, Outpatient of the Department of Psychiatry, BSMMU
• Inpatient, Outpatient and Child and Adolescent Psychiatry Division</td></tr>
<tr><td>Thesis Work</td><td colspan="5">Protocol development/Submission/IRB clearance</td></tr>
<tr><td colspan="8">Block 2</td></tr>
<tr><td>Months</td><td>7th</td><td>8th</td><td>9th</td><td>10th</td><td>11th</td><td colspan="2">12th</td></tr>
<tr><td>Educational Program</td><td colspan="5">Neurodevelopmental Psychiatry

Basic Courses: Biostatistics, Research Methodology, Basic of Medical Education</td><td rowspan="3">E
O
B
A</td></tr>
<tr><td>Clinical Training Rotations</td><td colspan="5">• Intellectual Disability Clinic, Autism Clinic and other Specialized Clincs relevant to Child and Adolescent Psychiatry in the department of Psychiatry, Paediadric Neurology division of Department of Paediatrics, BSMMU
• Institute of Paediatric Neurodisorder and Autism (IPNA), BSMMU.
• Training and service facilities in the community</td></tr>
<tr><td>Thesis Work</td><td colspan="5">Patient enrolment, intervention and data collection</td></tr>
<tr><td colspan="8">Block 3</td></tr>
<tr><td>Months</td><td>13th</td><td>14th</td><td>15th</td><td>16th</td><td>17th</td><td colspan="2">18th</td></tr>
<tr><td>Educational Program</td><td colspan="5">General Child and Adolescent Psychiatry

Emotional and behavioural disorder in Child and Adolescent Psychiatry</td><td rowspan="3">E
O
B
A</td></tr>
<tr><td>Clinical Training Rotations</td><td colspan="5">• Inpatient, Outpatient and Child and Adolescent Psychiatry Division
• Specialized Clinks relevant to Child and Adolescent Psychiatry in the department of Psychiatry
•</td></tr>
<tr><td>Thesis Work</td><td colspan="5">Patient enrolment, intervention and data collection</td></tr>
</table>

Block 4						
Months	19th	20th	21st	22nd	23rd	24th
Educational Program	General Child and Adolescent Psychiatry (Transcultural Child and Adolescent Psychiatry, Community Child and Adolescent Psychiatry, Rehabilitation Child and Adolescent Psychiatry)					E O B A
Clinical Training Rotations	• Inpatient, Outpatient Department of Psychiatry • Child and Adolescent Psychiatry Unit, Department of Psychiatry					
Thesis Work	**Patient enrolment, intervention and data collection**					

Block 5						
Months	25th	26th	27th	28th	29th	30th
Educational Program	Spécialités in Child and Adolescent Psychiatry(Child and Adolescent Psychotherapy, Child and Adolescent Substance Misuse Psychiatry, Forensic Child and Adolescent Psychiatry)					E O B A
Clinical Training Rotations	• Inpatient, Outpatient of the Department of Psychiatry • Child and Adolescent Psychiatry Division • Placement in Psychotherapy Division • Placement in General Adult Psychiatry Division • Adult, Forensic and Geriatric Psychiatry, ECT					
Thesis Work	**Data processing and Analysis**					

Block 6						
Months	31st	32nd	33rd	34th	35th	36th
Educational Program	Spécialités in Child and Adolescent Psychiatry(Infant Psychiatry, Family Psychiatry)		E O B A	Eligibility Assessment and Phase B Final Examination		
Clinical Training Rotations	• Child and Adolescent Psychiatry Division • Inpatient, Outpatient of General adult Psychiatry Division and Psychiatric emergency • Feto maternal unit Obstratics unit of the department of Gynaecology and Obstratics					
Thesis Work	**Report writing and Submission**					