Shaheed Zulfiqar Ali Bhutto Medical University

Curriculum for MD Psychiatry

Four Years Program

Department of Psychiatry, Pakistan Institute Of Medical Sciences

General Overview of the MD Psychiatry Curriculum:

Statutes

1. **Nomenclature of the proposed Course:**

   The name of degree program shall be MD Psychiatry. This name is well recognized and established for the last many decades worldwide.

2. **Course Title:**

   MD psychiatry

3. **Training Centre:**

   Department of Psychiatry, Pakistan Institute of Medical Sciences, FMTI.

4. **Duration of Course:** The duration of MD Psychiatry course shall be four 4 with structured training in a SZABMU recognized department (Psychiatry department, PIMS) under the guidance of an approved supervisor.

5. **Overview of the course structure:**

   The course is structured in 2 parts; each part will have duration of 2 years each.

   After admission, during the 4 years in MD Psychiatry program the trainee will be stationed in various sub specialty units of psychiatry and medicine. Additionally the trainee will get an in depth understanding of clinical aspects of basic medical sciences and neurosciences with a salient focus on psychological sciences. The trainees will also undergo training in basic principles of research and will work at the development and completion of a research project.

After completion of year 2 training, the trainees will undertake an intermediate training exam. During the training period, trainees will work as registrars in the aforementioned department, where experienced psychiatrists will supervise them. The trainee will be able to undertake the MD Psychiatry final exam provided the intermediate exam has been cleared and a research project report/thesis has been submitted to Shaheed Zulfiqar Ali Bhutto Medical University. The final degree will be awarded upon completion of all the requirements stipulated in the document.

Statement of the Competences: The postgraduate MD psychiatry student in psychiatry shall aim at the development of specific competencies, defined and spelt out in clear terms.

Components of the MD Psychiatry Postgraduate Curriculum

The major components of the postgraduate curriculum shall be to include relevant theoretical knowledge and to develop practical and clinical skills and attitudes, including communication skills, training in research methodology, thesis writing and publication skills.

General objectives of postgraduate training expected from students at the end of postgraduate training:

i. Sufficient understanding of the basic sciences relevant to the subject of psychiatry.
ii. To diagnose and manage both the common and novel presentations of psychiatric conditions
iii. To gain an understanding of cultural presentations of the psychiatric conditions.
iv. To plan and advise measures for the prevention and rehabilitation of the mentally unwell.
v. To gain adequate knowledge and understanding about the evidence based management of psychiatric conditions.
vi. To demonstrate skills in the documentation of individual case records of morbidity and mortality.
vii. To uphold and practice the ethical principles thereby safeguarding the rights of the mentally unwell.
viii. To have empathy and a humane approach toward patients and their families
ix. To have skills for the implementation of a national health program effectively and efficiently.
x. To organize and supervise healthcare services, demonstrating adequate managerial skills in the clinical/ hospital setting
xi. To develop a self-directed learning ability, recognize continuing educational needs; select and use the appropriate learning resources

xii. To develop skills in using educational methods and techniques for teaching of medical students

xiii. To demonstrate being an effective leader of a health team

Competencies:

At the end of the 4 years the candidate should be able to

- Be able to carry out a compressive and holistic assessment of a person presenting with mental health condition.
- Be able to formulate a safe and holistic management plan for the mental health conditions.
- Be able to have an understanding of evidence-based treatments for the various mental health conditions.
- Be able to have the knowledge and capacity to apply the various psychiatric clinical treatment guidelines for mental health conditions.

Admission Criteria

Applications for admission to MD Training Programs will be invited through advertisement in print and electronic media mentioning closing date of applications and date of Entry Examination.

Admission Eligibility

The applicant on the last date of submission of applications for admission must possess the following:

1. Basic Medical Qualification of MBBS or equivalent medical qualification recognized by Pakistan Medical Council (PMC).
2. Certificate of one year's House Job experience in institutions recognized by PMC is essential at the time of interview. The applicant is required to submit certificate from the concerned Medical Superintendent that the House Job shall be completed before the interview if the House Job is going on at the time advertisement and will be completed before start of MD Psychiatry training session.
3. Valid certificate of permanent or provisional registration with PMC.

4. Passed entry test and aptitude interview conducted by SZABMU.
5. Having up to the mark credentials as per SZABMU rules (number of attempts in each professional, any gold medals or distinctions, relevant work experience, rural service, research experience in a recognized institution, any research article published in a National or International Journal) may also be considered on case to case basis.

Registration and enrolment

1) As per policy of PMC, the number of Post Graduate Trainees/Students per supervisor shall be maximum five per annum.
2) Beds to trainee ratio at the approved teaching site shall be at least 5 beds per trainee.
3) SZABMU will approve supervisors for MD courses.
4) Candidates selected for the courses: after their enrollment at the relevant institutions shall be registered with SZABMU as per prescribed Registration Regulations.

Course Structure

1) 1st year
   - Clinically oriented basic Psychiatric phenomenology
   - Clinical training to assess psychiatric disorders
   - Understanding Medial Ethics
2) 2nd year
   - Clinical rotation in Psychiatry, Neurology, Internal Medicine
   - Understanding research and writing synopsis
   - Completion of basic workshops
   - Supervised ECT rotations

3) Intermediate examination and submission of research synopsis
4) 3rd year
   - Structured rotations in Forensic and Child Psychiatry
   - carrying out research project.
5) 4th year

- Community mental health training
- Writing thesis of carried out research, dissemination of research findings.

6) Final MD examination
7) Degree awarding

Entry in to the program

Prerequisites for applying to enter the Fellowship Program are:

- MBBS degree
- Valid certificate of permanent or provisional registration with Pakistan Medical Council.
- Completed one year House Job
- One year experience in Psychiatry/Internal Medicine/Allied medical discipline in the given order of preference
- Registration with PMC
- Have passed the MD entry examination conducted by the SZABMU; a weightage of 50% shall be given to the entry test, which will have an OSCE component with an additional weightage of 20%.
- An aptitude interview will be conducted for the candidate that will have a weightage of 30%.
- Published research papers in psychiatry in an accredited journal will be given precedence in selection process.
- Having up to the mark credentials as per SZABMU rules (no. of attempts in each professional, any gold medals or distinctions, relevant work experience, Rural/ Army services, research experience in a recognized institution, any research article published in a National or International Journal) may also be considered on case to case basis.

Exemptions

A candidate holding FCPS/MRCP/Diplomat American Board/equivalent qualification in Internal Medicine shall be exempted from Part-I & Part-II Examinations and shall be directly admitted to Part-III Examinations, subject to fulfillment of requirements for the examination.

The Course Is Structured In Three Parts:

1. Part I is structured for the 1st calendar year.
2. Part II is structured for the 2nd calendar year.
3. Part III is structured for 3rd calendar year.
4. Part IV is structured in 4th calendar year.

MD entry examination syllabus outline:

All candidates entering into the MD program are expected to pass the MD entry examination. The syllabus of the MD entry examination and the eligibility criteria is as follows;

General Regulations

Following regulations apply to all candidates taking MD entry examinations. Candidate will be admitted to the examination in the name (surname and other names) as given in the MBBS degree. SZABMU will not entertain any application for change of name on the basis of marriage / divorce / deed.

Eligibility for MD entry examination:

- MBBS or equivalent qualifications registered with the PMC.
- One year house job in an institution recognized by the SZABMU / PMC, which should have been completed at least two months before the date of examination.
- Deficiency of house job could be compensated by an equal period of residency in an institution recognized by the SZABMU.

FORMAT OF EXAMINATION

The examinations shall consist of two theory papers (Paper-I and Paper-II), consisting of 100 MCQs (one best type) each:

PAPER- I (three hours) will contain questions from thecore knowledge of the following subjects:

- Anatomy
- Physiology and Biochemistry

- Pathology and Microbiology
- Pharmacology
- Research and Biostatics
- Behavioral science and medical ethics

PAPER II (three hours) will contain questions fromthe following areas:

- Neuroanatomy
- Neurophysiology and endocrinology
- Neuropathology
- Psychopharmacology
- Neurochemistry.

Validity of MD Entry Examination

The validity of a pass in MD entry examination will be for a period of two years plus the period of training in the concerned discipline.

The University Reserves the Right to Alter/Amend Any Rules/Regulations

Any decision taken by the University on the interpretation of these regulations will be binding on the applicant.

Syllabus for the MD program entry examination:

Candidates appearing in the MD entry examination are expected to have a sound working knowledge of the structure and functions of the human body. Moreover they need to have in-depth understanding of the various mechanisms whereby these structures and functions are altered leading to diseased states. The emphasis in the MD entry examination is on comprehension of the various mechanisms by which the body works and adjusts to external and internal changes. Concepts of the integration and interrelationship of various parts of the body are to be given more importance than finer details of structure and function.

The outline of various topics given in this syllabus is a guide to what at the moment are considered to be important topics, which the candidate is expected to know. This

is to help both the candidate and the examiner in defining the minimum boundaries of MD entry examination.

- Paper I will comprise of the following: anatomy, physiology, biochemistry, pharmacology, pathology, microbiology, research and basic concepts of biostatistics.
- Paper II will comprise of neuroanatomy, neurophysiology and endocrinology, neuropathology, psychopharmacology, neurochemistry.

PAPER I

I. ANATOMY

1. General Features:
   - Muscles
   - Joints
   - Blood vessels

General Embryology - General aspects

2. Histology - General Features:
   - Epithelia
   - Muscles
   - Nerves
   - Blood vessels
   - Connective tissue
   - Lymphoid tissue
4. Brain and spinal cord - General Features:
   - Spinal nerves
   - Cranial nerves
   - Vertebral Column
5. Head and Neck - General Features:
   - Major blood vessels
6. Viscera: General Features: Blood and Nerve Supply:
   - Heart
   - Lung

- Kidney
- Liver

7. Endocrine glands – Gross structure and important relations of Pituitary, Thyroid, parathyroid and adrenal gland

II. Physiology, Biochemistry and Pharmacology

1. General Physiology:
   - Components of cell with their major functions. Transport across cell membrane
   - Action Potential, Muscle contraction
   - Classification and properties of nerve fibers
   - Receptors: types and functions
   - Somatic sensations, transmission of pain
   - Function of motor and sensory areas
   - Cerebrospinal fluid (CSF) - formation, functions, drainage
   - Autonomic nervous system: parts and their functions
   - General properties and composition of blood including Normal Cell counts and functions of RBCs, WBCs and platelets
   - Mechanism of homeostatic coagulation factors and their actions
   - Blood groups
   - Conducting tissues of heart: generation and propagation of cardiac impulse
   - Cardiac cycle (pressure, volumes, valvular changes).
   - Blood pressure and its regulations
   - Respiration: Ventilation, transport of gases and regulation of respiration
   - Body fluids: compartments and regulation of osmotic equilibrium
   - Regulation of E.C.F, blood volume and flow
   - Peripheral circulation.
   - General functions of kidney.
   - Regulation of body temperature.

2. Biochemistry:

   - Requisites of a balanced diet
   - General principles of electrolyte balance
   - Role and function of endocrine hormones - feedback mechanism.

- Metabolism of carbohydrates, proteins, fats and vitamins

3. Pharmacology:

- Clinical Pharmacokinetics
- Adverse reactions of common drugs
- General principles of rational drug therapy

III. Pathology Including Microbiology

1. Effects of injury on cell by physical, chemical and biological agents
2. Inflammation
   - Acute
   - Chronic including granulamatous
3. Regeneration and Repair
4. Metabolic Response to Trauma
5. Disturbance of homeostatic mechanism
   - Hemorrhage and Shock - mechanism and types
   - Edema
   - Disturbance of fluids and electrolytes
6. Thrombosis and embolism, Infarction and gangrene
7. Disorders of growth - Atrophy, hypertrophy, hyperplasia
8. Carcinogens and pre-malignant lesions
9. Neoplasia: Types and spread of tumor
10. General characteristics of bacteria, viruses, parasites and fungi
11. Immune system: General principle
12. Medical genetics - basic concept
13. Interpretation of routine Biochemical tests e.g. liver function tests, glucose, urea, creatinine
14. Nutritional diseases, disorders due to deficiency of vitamins and minerals

IV. Research and Biostatistics Basic Concepts

Epidemiology:

- An introduction to Epidemiology and its role in understanding distribution and determinants of disease.
- Measures of disease occurrence

- Study designs, their advantages / disadvantages
- Measures of association
- Chances, Bias and Confounding
- Screening

Biostatistics:

- Introduction to Biostatistics
- Data and its kinds
- Summarization of data
- Measures of Central Tendency and Dispersion
- Normal Distribution
- Point and Interval estimation and Probability
- Hypothesis testing, significance level and power
- Sampling and its Techniques

PAPER-II

Psychiatry (MD-I)

I. Behavioral Science and Medical Ethics - General Principles

1. Medical Ethics
2. Communication skills including Doctor Patient relationship and counseling
3. Psycho social aspect of general health care
4. Principles of Breaking Bad News
5. Principles of Communication skills
6. Doctor Patient Relationship
7. Principles of Autonomy
8. Principles of Leading Balanced Life
9. Stress and time management

II. Neuro Anatomy

1. Development of CNS and its common developmental anomalies
2. Cerebral cortex - structure, areas and blood supply
3. Hypothalamus
4. Thalamus
5. Limbic system and reticular formation

6. Basal ganglia
7. Cerebellum
8. Brain stem
9. Peripheral nervous system
10. Autonomic nervous system

II. Neuro Physiology And Endocrinology

Cerebral Cortex:

Functions of lobes (includes functions like speech and executive functions)

- Frontal
- Parietal
- Temporal
- Occipital

Sensory system:

1. Somatic senses
    - Receptors
    - Pathways
    - Consequences of interruption of pathways
    - Lesions at relay stations
    - Touch
    - Temperature
    - Pain
    - Pressure
    - Vibration
    - Gateway theory
    - Analgesia system

2. Special senses pathways and consequences of disruption of pathways
    - Vision
    - Equilibrium
    - Auditory
    - Gustatory
    - Olfactory

Motor system:

1. Posture
    - Local (muscle spindles etc)
    - Central controlled mechanism
        i. Extra-pyramidal system
        ii. Cerebellum
2. Balance (cerebellum and spinal cord)
3. Locomotion
    - Central (cortical centres, pathways, termination
    - Peripheral (anterior horn cells)

Homeostasis.

Vegetative functions:

Control mechanisms, major areas determining these functions, especially reticular formation

- Sleep
- Appetite
- Sex
- Normal EEG patterns
- Seasonal and circadian rhythms

Memory:

Major sites / nuclei, neurotransmitters involved and disturbances

Emotions:

Control of emotions and role of limbic areas

Endocrinology:

Pituitary, Thyroid, Adrenal glands

III. NEURO PATHOLOGY

1. Degenerative disorders including disorders involving memory and vegetative functions
2. Infections of CNS including AIDS, dementia complex
3. Tumours of CNS
4. Nutritional, metabolic and endocrinological disorders including encephalopathies like renal, hepatic etc.

5. Vascular disorders including vascular dementia, migrains and connective tissue disorders
6. Head injury and its sequelae

IV. Psycho Pharmacology

1. Neuro hormonal transmission and the substances involved:
   - Acetylcholine, adrenaline, noradrenaline
   - 5-hydroxytryptamine, GABA etc.
2. Psychotropic drugs:
   - Anti anxiety drugs
   - Anti depressants
   - Anti psychotics
   - Anti epileptics
   - Mood stabilizers
   - Anti Parkinsonian drugs
   - Addiction and drug dependence
   - CNS stimulants and depressants, psychedelics, drugs with Neuro-psychiatric side effects
   - Drug interaction

V. Neuro Chemistry

1. Enzymatic processes in formation and degradation of neurotransmitter
2. Receptors in relation to neurotransmitters
3. Post receptor transmission (second and third messenger mechanisms)
4. Formation of neurotransmitters - Excitatory and Inhibitory action and site of manufacture & mechanism of release
5. Autoimmune nervous system sympathetic and parasympathetic

Entry into MD psychiatry training program:

Candidates scoring 60% in the entry test examination will be eligible for the interview. The candidates who qualify for the interview shall undergo a face-to-face interview conducted by a panel of consultant psychiatrist from SZBMU/ psychiatry department, FMTI, PIMS and the faculty of Shaheed Zulfiqar Ali Bhutto Medical University.

MD psychiatry program training structure and outline:

Training and examination

General regulations

Candidate will be admitted to the examination in the name (surname and other names) as given in the MBBS degree. SZABMU will not entertain any application for change of name on the basis of marriage/ divorce / deed.

Registration and Supervision

All trainings must be supervised, and trainees are required to register with the within 30 days of start of the training for the Intermediate Module. In case of delay in registration, the start of training will be considered from the date of receipt of application by the DME (SZABMU). Registration forms are available.

The Course Is Structured In Three Parts:

1. Part I is structured for the 1st calendar year.
2. Part II is structured for the 2nd calendar years.
3. Part III is structured for 3rd calendar years
4. Part IV is structured in 4th calendar year.

Year I	Year II	Year III	Year IV
Basic Medical Sciences: Behavioral Sciences Neuroanatomy Neurophysiology Genetics Neurochemistry Psycho pharmacology Developmental and Behavior Psychology Social Sciences Biostatistics & Research Methodology Statistics and Epidemiology	Internal medicine - 3 months Neurology with neuro radiology for 3 months Psychology - 3 months ECT administration – 1 month rotation in ECT administration The Candidate will gain an understanding of: Diagnostic assessment of all psychiatric diseases Etiopathogenesis& Psychopathology Cultural presentations of various mental health conditions Mental Health Ordinance Principles and application of principles of medical ethics	Core clinical rotation in general adult psychiatry 9 months including rotation in 2 psychiatric subspecialties of Liaison psychiatry – 3 months Old age psychiatry – 3 months The candidate will gain an understanding of: Various psychiatric presentations Therapeutics relevant to all Psychiatric disorders Prognosis of various disorders Necessary knowledge about prevention and mental health promotion and research methodology Theoretical underpinnings of the major treatment modalities for psychiatric disorders, including biological, psychotherapeutic, and social and family interventions Community-based psychiatry.	Child & Adolescent psychiatry – 3 months Forensic psychiatry – 3 months Substance use disorder service – 3 months Community mental health – 3 months The Candidate will gain an understanding of: Various presentations and management of child and adolescent mental health disorders Be able to manage substance used conditions according to evidence based principles. Carry out a holistic forensic assessment and prepare forensic reports Be able to make an independent assessment of mental health conditions presenting in community and be able to manage all priority mhGAP disorders in the community
YEAR END ASSESSMENT: At the end of first year the examination shall be held in Basic Medical Sciences	YEAR END ASSESSMENT: At the end of 2nd year, the examination shall be held in fundamental concepts of Internal Medicine, Primary Care and Psychiatry.	YEAR END ASSESSMENT: All candidates shall appear in exam(end of 3RD calendar year), and having passed the part I & II examinations.	YEAR END ASSESSMENT: All candidates shall appear in Part-III exam(end of 5th calendar year), and having passed the part I II & III examinations.

MD PSYCHIATRY YEAR I & year II

Duration

The duration of training for the Intermediate Module examination is two years; the trainee is eligible to take the Intermediate Module examination uponcompletion of the two years training.

Rotations

Three months of rotation in each of the following disciplines is mandatory during in the Intermediate Module training:

- Medicine: 3 months
- Neurology: 3 months
- Clinical Psychology: 3 months
- Electro convulsive therapy 1 month

Components of Training

Mandatory Workshops

It is mandatory for all MD Psychiatry trainees to attend the following workshops before the intermediate module examination (these workshops have to be completed in the first two years of trainings.

1) Research Methodology and Dissertation Writing
2) Communication Skills
3) BLS (Basic Life Support)

Additionally any other workshop/s as may be introduced by SZABMU will have to be completed by the MD trainee.

Note: No candidate will be allowed to appear in IMM examination without attending the abovementioned workshops including BLS.

Logbook

Logbook is mandatory for all MD trainees inducted upon registration with SZABMU. Each trainee will be allotted a registration number to make entries of all work performed and the academic activities undertaken in logbook on daily basis. The concerned supervisor is required to verify the entries made by the trainee. This system ensures timely entries by the trainee and prompt verification by the supervisor. It will help in monitoring the progress of trainees and vigilance of supervisors.

Research Dissertation and Clinical Audit Publication:

One of the training requirements for MD Psychiatry trainees is a dissertation to be submitted to SZABMU research cell for approval. The MD trainee needs to have carried out the following research tasks by the end of second year of training.

- By the end of the second year the MD trainee must finalize the research topic and should have the research synopsis approved by the SZABMU research department.
- Each MD trainee during the tenure must have carried out a clinical audit and have it approved for publication in the local SZABMU journal. This audit publication must be done by the end of second year.

Assessment

Typically this Structured Training Program (STP) recommends a system of internal assessment by the training institution using a formative approach and a summative assessment organized by the Shaheed Zulfiqar Ali Bhutto Medical University, Islamabad, Pakistan at the end of the training period - examination.

1. Assessment by the Training Institution

The methods that are recommended for use as part of the internal assessment organized by the training institution are:

a. Portfolio-Based Assessments:

Supervisor will ensure the maintenance of a portfolio by each trainee, containing the training programs, weekly work schedule and the following documents:

- Histories and formulations (specimen presented by each trainee).
- Test results /feedback from consultant.
- Presentations made in journal clubs and seminars
- Salient features of feedback sessions by consultant / supervisor on histories, formulations and psychotherapy sessions
- Salient features of feedback sessions on internal assessment performance
- Clinical audit report – each trainee during the tenure must have carried out a clinical audit and have it approved for publication in the local RMU journal. This audit publication must be done by the end of second year.
- Ongoing assessment record particularly of attitudes and scores on professionalism parameters

b. Written and clinical internal assessments:

Quarterly and annual assessments patterned on the FCPS Intermediate Module format of exams will be conducted locally by Institute of Psychiatry to give practice to the trainees as well as provide dry runs for the subsequent final assessments.

A suggested format is as follows:

- Written (33%)

Paper I: One best type MCQs

Paper II:

  - 10 SEQs
  - Clinicals (34%). The clinical examination will consist of one long case, three short cases (Psychiatry, Medicine, Neurology), Structured Viva / TOACS or OSCE
  - Attitude: Professionalism: (33%)

c. Feedback Sessions

Detailed feedback sessions for the trainees will be regularly organized. These may be based on their ongoing clinical performance, attitudes, and performance in the quarterly assessments.

An important component of the supervision will be a feedback by the trainee on the supervisor as well as the training institution. This feedback can be directly submitted to the SZABMUDME on a yearly basis.

d. Assessment of Attitudes and Professional Character Development

All trainees must, in advance, be communicated the details of parameters of professionalism and required attitudes on which they will be assessed, during the course of their training. These attitudes are recommended to be assessed and reported after each quarter. The recorded details must be communicated to the candidate in person by his supervisor. A total of 33% marks in the internal assessment may be allocated to this domain. Any student showing sloppiness, deterioration or inability to come up to the required standards must be counseled adequately by his/ her supervisor and a record of the same be placed in the portfolio. An Inability to improve or change in the behavior or attitude over the next 12 weeks may be communicated to Head of Department and would put the candidate in a position to be dismissed from training or any other action deemed suitable by the institution.

S. No. Professional CHARACTER DEVELOPMENT

1. Professional attire/ demeanor 2%
2. Respect for time and punctuality 6%
3. Grasp and knowledge of own patients 6%
4. Conscientiousness 6%
5. Integrity in reporting patients findings 6%
6. Availability to the patients 3%
7. Relationships with colleagues, hospital staff and patients 4%

Total 33%

Format of Examination

- Intermediate Module examination consists of the following two components:

  Theory examination: this will comprise of 2 papers
  - Paper I 10 SEQs
  - Paper II 10 SEQs

Clinical examination:

To test basic clinical skills, the clinical examination consists of TOACS (Task Oriented Assessment of Clinical Skills)12-18 TOACS Stations

Only those candidates who qualify in theory will be eligible to take the TOACS examination.

TOACS - (Task Oriented Assessment of Clinical Skills)

TOACS will comprise of 12 to 18 stations with a change time of one minute for the candidate to move from one station to the other. The stations will have an examiner and a patient.

LEARNING OBJECTIVES

At the end of the Intermediate Module training in Psychiatry, the candidate will be able to:

As regards knowledge

1. Distinguish Normality from Abnormality in the light of the concept of mental health
2. Discuss anthropological, social and psychological determinants of normal development
3. Relate the interplay of biological factors with psychosocial factors in the genesis of mental illness and disability
4. Discuss the clinical features in phenomenological terms
5. Classify the clinical presentation of patients into current ICD categories and the variation of the same in the parallel DSM.
6. Request and justify laboratory, radiological, electrophysiological, psychometric and social investigations
7. Use neurobiological, psychological and social theories in clinical assessment and management
8. Identify common neurological and medical disorders relevant to psychiatric practice
9. Plan pharmacological and psychosocial management of common psychiatric disorders as well as neurological and medical disorders relevant to mental health

10. Apply evidence-based guidelines to manage clinical situations in emergency, outdoor and indoor settings.

AS REGARDS SKILLS

Written Communication Skills

1. Write comprehensive history and mental state examination
2. Update medical records in clear, concise and accurate manner
3. Write a formulation for professional communication
4. Write management plans, discharge summaries and referral notes
5. Demonstrate competence in medical writing

Verbal Communication Skills

1. Establish professional communication with patients and their relatives, fellow members of the mental health team and staff members
2. Demonstrate usage of appropriate language in e-communication, seminars, bedside sessions, out patients and other work situations
3. Demonstrate the ability to communicate clearly, considerately and sensitively with patients, relatives, other health professionals and the public
4. Demonstrate competence in presentation skills
5. Provide informational care and counsel patients
6. Use telemedicine (if an opportunity exists) in practicing health

Examination Skills

1. Initially assess the patients by
    - Obtaining pertinent history
    - Assessing the mental state
    - Performing physical examination correctly
2. Perform an accurate physical and mental state examination in complex clinical problems often involving multiple systems

Patient Management Skills

1. Interpret and integrate the history and examination findings and arrive at an appropriate differential diagnosis and final diagnosis

2. Demonstrate competence in identification, analysis and management of the problem at hand by using appropriate resources, and interpretation of investigation results
3. Prioritize clinical problems for the start of interventions
4. Use evidence-based pharmacologic, psychological and social interventions
5. Independently undertake counselling and informational care sessions
6. Independently conduct supportive psychotherapy, group therapy and behaviour therapy
7. Independently use electroplexy (electroconvulsive therapy) and other evidence-based physical methods of psychiatric treatment

Skills in Research

1. Undertake literature search and collect evidence base and standard guidelines for use in clinical practice
2. Develop a synopsis or a research proposal using CPSP guidelines
3. Interpret, summarize and use research articles in clinical practice, develop a research synopsis and undertake a literature review
4. Learn to carry out a clinical audit and have it approved for publication in the local RMU journal. This audit publication must be done by the end of second year.

Administrative and Managerial Skills

1. Acquire administrative and managerial skills to assist in running a Psychiatry unit /institution
2. Organize educational, training and research activities

As regards attitudes towards patients

1. Establish an ethical and therapeutic relationship with all patients
2. Demonstrate commitment to the bio-psycho-social model in the assessment and management of patients
3. Demonstrate sensitivity, empathy and understanding while performing physical and mental state examination and adhere to highest ethical standards

4. Consistently show consideration of the interests of the patient and the community paramount and always above personal interest
5. Exhibit highest standards of professionalism through the practice of integrity, compassion, honor, altruism, excellence, humanism and respect for patients, as well as their family and the community.

Towards Self Development

1. Demonstrate consistent respect for every human being irrespective of ethnic background, culture, socioeconomic status and religion.
2. Deal with patients in a non-discriminatory and prejudice free manner.
3. Deal with patients with honesty, equity and compassion.
4. Demonstrate flexibility and willingness to adjust appropriately to changing circumstances.
5. Foster the habit and principles of self education and reflection in order to constantly update and refresh knowledge and skills and a commitment to continuing education.
6. Recognize stress in self and others.
7. Deal with own stress and support medical colleagues and allied health workers in stress.
8. Handle criticism by colleagues, patients, their family and the community constructively. Develop ability of self criticism.
9. Identify limitations of self and obtain and value a second opinion on clinical matters.
10. Demonstrate effectiveness as member of the team, as well as a leader
11. Adhere to principles of medical ethics in general and mental health ethics in particular in all walks of his professional life.

Towards Society

1. Exhibit sensitivity towards social, ethical and legal aspects of health care provision
2. Offer cost effective professional services

Expected Clinical Activities in Two years of Training:

The areas and minimum activities to be covered during the two years of training are as under:

1. Outpatients 100 outpatient days
2. Inpatients 100 patients
3. ECT under GA (includes50 applications preparation, administration, patient safety, and recovery)
4. Emergency 30 emergency duties
5. Medicine 20 patients
6. Neurology and Organic Psychiatry 20 patients
7. Psychosocial rehabilitation 5 patients
8. Psychometric tests administered20 cases and interpreted
9. Seminars/journal club 10 presentations in -journal club meetingsand 5 in seminars
10. Counseling Sessions /NPIs 10 cases
11. Supportive and Group, Behaviour therapy 30 cases
12. Specialized Investigations 15 cases (Lab, Radiological, Electrophysiological)

Competence Level Expected of a Trainee in Psychiatry for MD Psychiatry after Two Years

A candidate is expected to attain the laid down level of competence by the end of each specified period as given below:

Note: Familiarization with routine/baseline laboratory, radiological and electrophysiological investigations as well as lumbar puncture and fundoscopy should invariably be pursued from the first month of training.

Key to competency levels in clinical skills:

1. Observer status
2. Assistant status

3. Performed under supervision
4. Performed independently
5. Ability to teach others and critically evaluate.

Rotational Training

1. **Clinical Psychology (Three months)**

While the trainee will work in constant liaison with psychological services, throughout the period of his/her training, he or she will undergo three months exclusive training, covering the following areas:

- Undertake detailed psychosocial history and evaluation of 30 cases.
- Use basic principles of psychology (motivation, perception, thinking, emotions, etc) in his/her assessment of various psychopathological phenomena
- Link stages and theories of personality development to the assessment of personality in clinical settings.
- Develop a psychoanalytic, psychodynamic, behavioral and cognitive formulation.
- Run and interpret psychometric tests of personality, intelligence, memory, and organicity.
- Use and interpret patient and interviewer filled diagnostic and prognostic tests of common psychiatric conditions.
  Assist the group therapy, and individual supportive, behavioral and cognitive psychotherapy sessions
  Neurology (Three months)

2. **Neurology**

Rotation in Neurology will train the candidate to:

- Undertake detailed neurological examination of 20 cases(sensory and motor system, cranial nerves including fundocopy, cerebral and cerebeller functions)

- Identify common neurological conditions that appear in the differential diagnoses of psychiatric disorders
- Delineate the site, type, and pathological basis of lesions in patients presenting with neurological symptoms
- Interpret laboratory, radiological and electrophysiological tests commonly undertaken in neurological cases
- Undertake emergency, outpatient and indoor management of common neurological disorders
- Apply the knowledge of drug interactions between psychotropics and various common drugs used in neurological conditions
- Detect the psychosocial correlates and psychiatric co-morbidities in patients with common neurological conditions

3. **Medicine (Three months)**

Rotation in Medicine will be focused so that the candidate is able to:

- Undertake detailed physical and systemic examination of 20 cases
- Identify common medical conditions that appear in the differential diagnoses of psychiatric disorders
- Interpret laboratory, radiological and electrophysiological tests commonly undertaken in medical cases
- Undertake emergency, outpatient and indoor management of common medical disorders
- Apply the knowledge of drug interactions between psychotropics and various common drugs used in medical conditions
- Detect the psychosocial correlates and psychiatric co-morbidities in patients with common medical conditions

The Syllabus

The minimum list of clinical problems that a trainee must learn to manage using the bio psychosocial model of assessment and care include the following:

The suggested list of learning topics that need to be covered through various modes of information transfer to provide the knowledge, skills and attitudes required to manage the above mentioned list of clinical scenarios is as follows:

1. **First Year**

History taking, General Physical examination, Systemic Examination, Detailed Neurological Examination, Mental State Assessment.
Phenomenology: Disorders of Consciousness, Thinking and Speech, Emotions, Perception, Memory
Classification of Psychiatric Disorders: ICD current version (comparison of categories and diagnostic criteria with current version of DSM)
Mental Health: normality vs abnormality Bio-Psycho-Social Model of Health Care

Ethics: The Hippocratic Oath, The issues of transference and counter-transference, Doctor-Patient relationship, Patient's and Doctor's rights, Peculiar ethical issues in Psychiatry, Relationship with pharmaceutical industry, media and other social institutions Professionalism

Biological Basis of Human Behavior: Neuroanatomical structures and associated syndromes, Neurochemical and Neurophysiological concepts, Psychoneuroendocrinology, Psychoneuroimmunology and Chronobiology.

Behavioral Sciences: Psychology, Sociology, Anthropology, Psychology, Perspectives in Psychology, History of Psychology, Learning, Memory, Perception, Intelligence, Consciousness and unconsciousness, Thinking and language, Motivation, Emotions Personality development, Childhood, Adolescence, Adulthood, Old age Cognitive, Social, Moral, Emotional, Sexual, Temperament Trait Theorists, Developmental Theorists, Schools of Psychopathology, Psychoanalytic, Psychodynamic, Cognitive, Interpersonal, Behavioral Psychological Assessment, Psychometrics Assessment of personality (ability to choose, administer and interpret at least one projective and two non-projective personality assessment tools) Measurement and Rating of Anxiety, Depression, Schizophrenia and Mania Scales Use of psychometric tools in assessing organicity.

Sociology: Social Factors Influencing Human Development, Mental Health and Illness:

- Stigma, Sick Roles, Deviance, Myths and Misconceptions.
- Social Class and Mental Disorders, Social causation theory, Drift Hypothesis, Segregation Hypothesis, Holmes and Rahe's Social Risk factors, Therapeutic Community, Institutionalisation, Deinstitutionalisation.
- Parenting and Child Rearing Practices, Impact of Discord, Violence, Child abuse, Divorce, Influence of Illness and Death on Child development.
- Social Theories of Weber, Marx, Durkheim, Foucault, Parsons, Goffman and Heberman.
- Family, Family Types.
- Social systems and stratifications.
- Social change.
- Gender differences, stereotyping, patriarchy, social roles and sexual harassment.
- Relationship between culture, society, ethnicity, race, religion, attitudes and values - the pluralist model. Pathoplastic effects of culture and its impact on doctor patient relationship.

Anthropology: The influence on mental health, and illness, of culture, society and environment.

- The evolutionary processes of civilization, society, ethnicity, culture, language, ways of living and their influence on causing differences in thinking, conduct, perception of reality, and behavior, across the world, in general and across Pakistan's provinces in particular.
- Study of people in their natural habitats e.g. subcultures of deserts, river beds, mountainous terrains, coastal areas and plains of Pakistan. Influence of the cultures and subcultures of Pakistan on presentation and treatment of psychiatric disorders.
- Significance and influence of shrines, faith healers, charlatans, quacks and alternative medicine on mental health issues and their management.
- Influence of culture on personality development, social roles, and gender issues.

- Culture bound syndromes: Dhaat Syndrome, Gas and Gola Syndrome, Possession state, Jin, Bhoot, Amok, Latah, Voodoo Cultural methods of psychotherapy and treatment of mental illness

Common Psychiatric Disorders: Anxiety, Depression, Psychosis, Somatization Disorder Anxiety disorders:

1. Generalized anxiety disorders
2. Phobic anxiety disorders
3. Panic disorders
4. Mixed anxiety and depressive disorders
5. Obsessive compulsive disorders

Management of Common Psychiatric emergencies

Second Year

1. Stress Related Disorders
- Dissociative disorders
- Adjustment Disorders
- Acute and Chronic Stress Disorder
- Acute stress reaction, PTSD
- Grief reactions
2. Mood disorders
- Bipolar Affective disorders
- Depression
- Persistent mood disorder
3. Schizophrenias and Schizoaffective Disorders
4. Drug Abuse
- Alcohol related disorders
- Opioids
- Anxiolytics and Hypnotics
- Cannabis
- Stimulants

- Solvents, Inhalants

5. Organic Psychiatry

- Delirium
- Dementia
- Focal cerebral syndrome
- Amnesias
- Neuro-degenerative disorders
- Cerebro-vascular syndromes
- Intracranial infections
- Brain tumors
- Multiple sclerosis
- Dyskinesias
- Epilepsy
- Sleep disorders
- Mental retardation

6. Non Pharmacological interventions (NPI's)

- Counseling and other non-pharmacological interventions such as relaxation training, breathing
- Exercises, and stress management techniques
- Crisis intervention
- Supportive psychotherapy
- Cognitive behavioral therapy
- Couples and family therapy
- Group therapy
- Psychoanalytical psychotherapy
- Behavioral techniques

7. **Electroplexy**

8. Psycho-Pharmacology

- Anxio-lytics
- Hypnotics
- Anti-psychotics
- Anti-parkinsonians
- Anti-depressants
- Mood stabilizers

- Psycho-stimulants
- Drug Interactions
- Non-psycho tropics with neuro-psychiatric effects

Phase of Training subject / Theme

First Quarter mental health: Normality vs Abnormality and Biopsychosocial Model of health care, Ethics

Second Quarter Phenomenology, Neurobiological basis of Human Behavior

Third Quarter Anthropological and Social influences on mental health Psychology, Psychometric

Fourth Quarter Neurology and Medicine in relevance to Psychiatry

Fifth Quarter Emergency and Outpatient Assessment and Management

Sixth Quarter Indoor Assessment, Psychometric, Lab, Radiological and Neuro physiological Investigations, Pharmacological Management, ECT

Seventh Quarter Non-pharmacological Interventions, Supportive, Group, Behavioral Therapies

Last Quarter Clinical Guidelines, Review Articles, Critical Appraisal, Clinical Audit

Organogram of SZABMU MD Training Program

Organizational Responsibilities

Dean

The Head of Department will be called Dean of Psychiatry who is responsible for the training program. He is responsible for

- Structuring the training program
- Uniformity, standardization and validation of training in all Departments.
- Evaluation of training in each Department.
- Evaluation of Faculty performance.

Program Director

Head of Psychiatry unit will be Program Director who will be responsible for training in his unit. He will;

- Assign Mentor to the Trainee
- Assign rotations to the Trainee.
- Sanction leave and provide information to TMU.
- Organize Assessment Examination.
- Make sure all feedback Performas are properly filled.
- Monthly meeting with Faculty and Supervisors for Trainee feedback.
- Meeting with Trainee after every 4 months for feedback to his/her performance.
- Internal assessment of Trainee.
- Facilitate Trainee in finalizing research/thesis topic and proposals after completion of first year.

Supervisor

Faculty member i.e., Professor, Associate Professor and Assistant professor will be supervisors.

He will be responsible for;

- Directly supervising training
- Filling supervisor assessment/evaluation Proforma.
- Responsible for Medical Record Evaluation Proforma
- Will get 360 degree feedback of the Trainee in Indoor, ER and Outpatient Departments
- Formal assessment.

Program Coordinator

Will be a Senior Registrar who will assist/help the Program Director in implementing the program like making rosters, leave records, keeping evaluation Performas and assessment records.

Components of Training Program

Details are given in curriculum of the MD- Training Program document of SZABMU

Training Constituents

Competency Based Medical Education (CBME)

Following are CBME components that will be employed for training, monitoring, and assessment/evaluation

Training Monitoring Cell (TMC)

Existing Department of Medical Education (DME), SZABMU will be upgraded to TMC. Its functions are given below.

TMC will keep record of

1. Working in Medical Unit and Rotational Units
2. Workshops
3. Research work
4. Leaves
5. Examinations
6. Feed back

Research Unit (RU), SZABMU

It will be responsible for monitoring and supervision of research by MD-Medicine trainees. RU will,

1. Arrange for/ensure conduction of research related Workshop
2. Help Trainees in research topic selection, synopsis and thesis writing. Synopsis work will be completed before end of 2nd year of training.
3. Ensure synopsis evaluation and approval will by Board of Advance Study and Research.
4. Supervise data collection for thesis writing in 3rd year.
5. Ensure thesis writing and completion in 4th year of training.

Following workshops are mandatory before appearing in Intermediate Examination i.e., end of 2nd year depending on the schedule given by RMU Research Unit.

1. Research Methodology & Communication skills
2. Computer Skills.
3. Clinical audit
4. Bio statistics (SPSS, End Note)
5. Critical Appraisal of Articles.

Assessment

Assessment/evaluation will be done with reference to knowledge, skill, and attitude. Details in this regard are given below

Training; Yearly Organization Guidelines

Following is broad outline in this regard. It should however be noted that Institutes/Hospital/Units may modify according to their specific needs and ground realities.

1. There will be three blocks of four months in each year.
2. Training will be imparted for Inpatient, Outpatient and Emergency care.
3. Trainees will also rotate after in exam in Child Psychiatry, Forensic Psychiatry & Liaison Psychiatry. The duration of rotations will be later decided depending upon need sand skill required
4. Trainees daily and weekly duty hours and timings will be governed by Institutional PGME Committee in the light of Policy and Procedure Manual (PPM) of Postgraduate Residents Admission, 2017(revised 2020). As guideline Trainee will complete 80 hours per week duty. This includes 8 hourly 6 days a week and 2 calls per week.
5. Supervisors Assessment Performa will be filled by each rotational Supervisor.
6. After each block Trainees will be evaluation based on details given in assessment.

Training; Daily & weekly Organization Guidelines

Following is broad outline in this regard. It should however be noted that Institutes/Hospital/Units may modify according to their specific needs and ground realities.

- Report of the previous day o Admissions o Expiries o Review of problematic calls from other departments etc
- Teaching Session- 75% attendance is necessary for every Trainee in the following: mortality meeting, long case, short cases, topic presentation, journal cub, MDM meetings

o Visiting faculty lectures

- Teaching Round

MD psychiatry year 2 and year 3 training

Eligibility for entrance into year II & year III of MD psychiatry trainings:

- All mandatory workshops should be attended during the first two years of training.
- IME examination conducted by SZABMU must be passed.
- Research synopsis submitted and approved by SZABMU research department.
- Clinical audit conducted and published in the local SZABMU/Annals of PIMS journal.

Research training requirements:

One of the training requirements for fellowship trainees is a dissertation on the research carried out on the approved topic whose research synopsis was submitted to the SZABMU research cell. The dissertation must be submitted for approval to the SZABMU research department before or during the first six months of fourth year of training program. Candidates whose dissertation is approved will only be allowed to take the final MD examination.

Instructional Methodology

Teaching will occur using several methodologies that range from clinical case management, case lectures and discussions, lectures, grand teaching rounds, clinico-pathological meetings, morbidity/mortality review meetings, literature reviews and presentations, journal clubs, conferences and seminars along with self directed learning. Clinical learning is organized to provide appropriate expertise and competence necessary to evaluate and manage common clinical problems. Demonstration in outpatient clinics and wards and procedural skill training on simulators, mannequins and patients are all practical training modalities.

Role and responsibilities of supervisors:

Supervision is a multifaceted task and essential for the comprehensive grooming of a trainee. The supervision task is arbitrarily divided into the following components for the sake of convenience.

Expert trainer:

1. This is the most fundamental role of the supervisors. They have to not only ensure and monitor adequate training but also provide continuous helpful feedback (formative) regarding the progress of the training.
2. This would entail observing the trainee's performance and rapport with all the people within his work environment.
3. He / she should teach the trainee and help him / her overcome the hurdles during the learning process.
4. It is the job of the supervisor to make the trainee develop the ability to interpret findings in his patients and act suitably in response.
5. The supervisor must be adept at providing guidance in writing dissertation / research articles (which are essential components of training).
6. Every supervisor is expected to participate actively in Supervisors' workshops, conducted regularly by CPSP, and do his/her best to implement the newly acquired information/ skills in the training. It is a basic duty of the supervisors to keep abreast of the innovations in their field of expertise and ensure that this information percolates to trainees of all years under them.

Proficient administrator:

1. He / she must ensure that the trainee's regularly fill their e-logbook and keep them updated.
2. They must provide assessment reports to the College at the end of each year or training period. These reports are used to evaluate a trainee's performance and should indicate if training has been followed satisfactorily. The report must also contain positive and negative aspects of the trainee's performance and any extra academic endeavors made by them. Prolonged absences must also be mentioned in sufficient detail. It is essential that each report be discussed and signed by both the trainer and the trainee before it is sent to the .The supervisors might be required to submit confidential reports on trainee's progress to the SZABMU.
3. The supervisor should notify the College of any change in the proposed approved training program.

4. In case the supervisor plans to be away for more than two months, he/she must arrange satisfactory alternate supervision during the period.

Role and responsibilities of trainees:

1. Accept responsibility for their own learning and ensure that it is in accord with the relevant requirements.
2. Investigate sources of information about the program and potential Supervisor, and play an informed role in the selection and appointment of the Supervisor.
3. Seek reasonable infrastructure support from their institution and Supervisor, and use this support effectively.
4. Ensure that they undertake training diligently.
5. Work with their supervisors in writing the synopsis/ research proposal and submit the synopsis/ research proposal within six months of registration with the SZABMU.
6. Accept responsibility for the dissertation, and plan and execute the research within the time limits defined.
7. Be responsible for arranging regular meetings with the supervisor to discuss any hindrances to progress and document progress etc. If the supervisor is not able /willing to meet with the student on a regular basis, the student must notify the College.

8. Provide the supervisor with word-processed updated synopsis and dissertation drafts that have been checked for spelling, grammar and typographical errors, prior to submission.
9. Ensure that the supervisor has all the raw data relevant to the thesis; prior to submission of dissertation.
10. Submit completed Dissertation to SZABMU research department six months before the completion of (last year of) training.
11. Follow the Colleges complaint procedures if serious problems arise;
12. Complete all requirements for sitting an examination.
13. Provide feedback regarding the training post to SZABMU on the prescribed confidential form.

Curriculum:

This is the second part of training program based on the 3rd and 4th years training leading to MD psychiatry

At the end of the MD Psychiatry, the candidates will be able to acquire the following attributes of knowledge, skills and attitudes:

Knowledge

- Formulate a diagnostic and management plan using medical, neurological, anthropological, psychological and social aspects of psychiatric disorders
- Critically evaluate and discuss contemporary issues in psychiatry
- Undertake appropriate assessment and management in the fields of adult, child, geriatric, organic, and liaison psychiatry
- Adequately use the knowledge about the cross cultural aspects of psychiatry in his/ her interactions with patients
- Appropriately use pharmacological, physical and non-pharmacological methods of treatment
- Appropriate use of articles of the Mental Health Act 2001 in forming forensic opinions
- Formulate plans to respond to major mental health challenges faced by the community

Skills

- Written Communication Skills
- The trainee will be able to:
  - Make a diagnostic formulation of a patient.
  - Update medical records in clear, concise and accurate manner
  - Formulate forensic assessments in the light of the relevant rules and instructions of Mental Health Act 2001.
  - Demonstrate competence in medical writing

Interpersonal Communication Skills:

The trainee will be able to

- Establish professional relationships with patients and their relatives and or caregivers in order to obtain a history, conduct a physical examination and provide appropriate management
- Demonstrate use of appropriate language and clear communication in seminars, bedside sessions, out patients, e-communication and other work situations
- Demonstrate competence in presentation skills in clinical, academic and professional settings
- Demonstrate the skills and art of effective communication with patients in therapeutic and professional interactions

Examination Skills

The trainee will be able to:

- Demonstrate the skills of effectively and smoothly carrying out the detailed physical, neurological and psychiatric examination and detect presence or absence of neurological, physical and psychpathological signs.
- Interpret general physical, systemic and mental state examinations to formulate diagnosis, differential diagnosis and management strategies.

Patient Management Skills

- Interpret and integrate the history and examination findings and arrive at an appropriate differential diagnosis and final diagnosis.
- Demonstrate competence in problem identification, analysis and management of the problem at hand by the use of appropriate resources, and interpretation of investigation results.
- Prioritize clinical problems for the start of interventions.
- Use evidence-based pharmacologic and psychosocial interventions. Formulate and execute management of complex cases with multisystem disorders.

- Independently conduct supportive psychotherapy, group therapy, behavior therapy and other evidence based psychotherapies or psychotherapeutic interventions.
- Independently use and teach electroplexy (electroconvulsive therapy) and other physical / biological therapeutic interventions.

Skills in Research

- The trainee will be able to:
- Undertake literature search and collect evidence based database and standard guidelines for use in clinical practice and research.
- Compile, interpret and discuss a research and write a dissertation / an article based on original research in a peer reviewed journal, in light of the instructions on the subject by SZABMU.
- Interpret and use results of various research articles to improve clinical practice and research.

Activities:

The areas and minimum activities to be covered during the two years of training are as under:

1.	Outpatients	150 out-patient days
2.	Inpatients	120 patients
3.	ECT	30 Patients
4.	Psychiatric Emergency	60 Patients
5.	Drug dependence, psychoactive substance abuse	15 patients
6.	Geriatric, Adolescent and Child psychiatry	36 patients
7.	Liaison psychiatry	20 patients
8.	Organic psychiatry	20 patients
9.	Psychosocial rehabilitation	20 patients
10.	Forensic Assessments	10 patients
11.	Public Mental Health	5 activities

12.	Psychometric tests administered	
	and interpreted	30 cases
13.	Seminars/journal club	20 Journal Club, 5 Seminars
14.	Counselling Sessions	20
15.	Supportive, Behaviour therapy/ Cognitive therapy or other evidence based psychotherapies	30 cases
16.	Specialized Investigations (EEG, CT, MRI etc	15
17.	Conferences/Workshops/symposia	5
18.	Administrative and Managerial tasks	15
19.	Ethical Issues and Dilemmas	10 cases

D psychiatry

The areas and minimum activities to be covered during the two years of training are as under:

1.	Outpatients	150 out-patient days
2.	Inpatients	120 patients
3.	ECT	30 Patients
4.	Psychiatric Emergency	60 Patients
5.	Drug dependence, psychoactive substance abuse	15 patients
6.	Geriatric, Adolescent and Child psychiatry	36 patients
7.	Liaison psychiatry	20 patients
8.	Organic psychiatry	20 patients
9.	Psychosocial rehabilitation	20 patients

10.	Forensic Assessments	10 patients
11.	Public Mental Health	5 activities
12.	Psychometric tests administered and interpreted	30 cases
13.	Seminars/journal club	20 Journal 5, Seminar
14.	Counseling Sessions	20 Patients
15.	Supportive, Behavior therapy/ Cognitive therapy or other evidence based psychotherapies	30 Cases
16.	Specialized Investigations (EEG, CT, MRI etc	15
17.	Conferences/Workshops/symposia	5
18.	Administrative and Managerial tasks	15
19.	Ethical Issues and Dilemmas	10 cases

Syllabus:

Child and Adolescent Psychiatry

1. Normal development of child
2. Classification of childhood Psychiatric Disorders
3. Psychiatric assessment of children
4. Pervasive developmental disorders
5. Hyperkinetic disorders
6. Conduct disorders
7. Anxiety disorder
8. Disorders of elimination
9. Mental sub-normality
10. Child abuse
11. Specific Learning Difficulties

Geriatric Psychiatry

1. Psychological issues of aging
2. Mood disorders in elderly

3. Anxiety disorders in elderly
4. Psychotic disorders in elderly
5. Abuse and neglect of elderly
6. Neuropsychiatric disorders
7. Primary and secondary pre-senile and senile dementias
8. Organization of community services for elderly
9. Rehabilitation
10. Care of the carers

Forensic Psychiatry

1. Mental health Act
2. Administrative Management of Psychiatric cases
3. Forensic Psychiatric Syndromes
4. Psychiatrists' role in court
5. Management of violence and risk assessment
6. Psychiatric report
7. Terrorism

Public Mental Health (Community Psychiatry)

Including knowledge and skills of organising and evaluating a community mental health programme and knowledge of the National Programme of Mental Health in Pakistan

Normal Human Sexuality and Sexual & Gender Identity Disorders

Personality disorder

Psychological factors affecting medical conditions

1. History, classification, and current trends
2. Gastrointestinal disorders
3. Obesity
4. Cardiovascular disorders
5. Respiratory disorders
6. Endocrine and metabolic disorders
7. Psycho-cutaneous disorders
8. Stress, infectious diseases and psychiatry

9. Behaviour and immunity
10. Psycho-oncology

Additional conditions that may be focus of attention

1. Treatment compliance
2. Adult antisocial behavior and criminality
3. Borderline intellectual functioning and academic problems

Special areas of study

1. Addictionology
2. Psychiatry and reproductive health
3. Genetic counseling
4. Death, dying and bereavement
5. Psycho-trauma

Psychotherapies

1. Evaluation for psychotherapy
2. Combined pharmacotherapy and psychotherapy
3. Supportive Therapy
4. Group therapy
5. Family therapy
6. Marital therapy
7. Interpersonal psychotherapy
8. Cognitive therapy
9. Behavior therapy

Final MD Psychiatry Assessment

Eligibility requirements for MD final exam in psychiatry examination:

The eligibility requirements for candidates appearing in final MD exam are:

1. To have undertaken four years of the specified training in Psychiatry, all of which should be after passing MD entrance exam
2. To provide certificate of having passed the Intermediate Module examination in MD Psychiatry.
3. To provide a certificate of attendance of mandatory workshops.
4. To have made regular entries &completed e-log book.
5. To provide a certificate of having passed the Intermediate Module in Psychiatry.
6. To provide a certificate of approval of dissertation by RMU research department.

Format of examinations:

Theory Examination

The written examination will comprise of two theory papers of 3 hours duration each:

Paper I 10 Short Essay Question - SEQs

Paper II 10 Short Essay Question – SEQs

Clinical Examination:

Only those candidates who pass the theory examination will be eligible to appear in the clinical examination. Detailed instructions will be sent out to all candidates who pass the theory exam regarding the date and particulars of the clinical exam.

The clinical examination consists of:

1. TOACS (Task Oriented Assessment of Clinical Skills) - 14 to 16 stations
2. Long case - One

Theory Examination

Paper I *SEQs:* Adult Psychiatry, Child and Adolescent Psychiatry and Psychogeriatrics

Paper II *SEQs:* Liaison Psychiatry, Organic Psychiatry, Public Mental Health, Forensic Psychiatry, Therapeutics including Psychotherapies, Addictionology / Substance abuse, Eating Disorders, Psychosexual Disorders, Reproductive Health, Psychotrauma.

Clinical Long Case:

Clinical interview and assessment of a complexpsychiatric management issue, its formulation, followed by a discussion on diagnosis, management, prognosis and modern guidelines, and recent advances on the issue.

Final MD Psychiatry examination

It will be conducted at the end of 4th calendar year of the program. Eligibility criteria

To appear in the Final Examination the candidate shall be required:

1. To have completed 3rd and 4th year training after passing IME and submitted the certificate of completion of training (issued by the Supervisor and countersigned by Director of Psychiatry) along with IME passing certificate.
2. To have achieved a cumulative score of 75% in Continuous Internal assessments of all training years.
3. To have got the thesis accepted.
4. To have submitted no dues certificate from all relevant departments including library, hostel, hospital, and cashier etc.
5. To have submitted evidence of submission of examination fee.

Final examination schedule and fee

1. Final examination will be held twice a year.
2. The candidates have to satisfy eligibility criteria before permission is granted to take the examination.
3. Examination fee will be determined by SZABMU periodically
4. The examination fee once deposited cannot be refunded /carried over to the next examination under any circumstances.
5. The Controller of Examinations will issue an Admittance Card with a photograph of the candidate on receipt of prescribed application form,

documents satisfying eligibility criteria and evidence of payment of examination fee. This card will also show the Roll Number, date/time and venue of examination.

Components of final examination
Final examination will consist of two components,

Written Part of Final Examination	500 Marks
Clinical, TOACS	500 Marks
Contribution of Continuous Internal Assessment	100Marks
Thesis Evaluation	400 Marks
Total	1500 marks

Written component

1. There will be two written papers which will cover the whole syllabus of Psychiatry training with total marks of 500.
2. The written examination will consist of two papers of 3 hours duration. Both papers shall have problem-based short/modified essay questions and MCQs.
3. Each paper will consist of

100 MCQs	200 marks
10 SEQs	100 marks
Total	300 marks

4. Each correct answer in the MCQ paper will carry 02 marks. An incorrect response in this regard will lead to deduction of O.5 mark. Each SEQ will carry 10 marks.
5. The candidates scoring a score of 60% marks in MCQ and SEQ paper will pass the written component final examination and will become eligible to appear in the clinical and oral examination.

6. The written component result will be valid for three consecutive attempts for appearing in the clinical part of Final Examination. After that the candidates will have to again appear and pass the written component of the Final Examination.
Clinical component

The Clinical component of Final Examination will be divided into,

	TOACS	10 Stations	100 marks
	Short Cases	4	200 Marks
	Long Case	1	300 Marks
	Total		600 marks
Pass mark in all components are 60%. Candidate has to pass all three components of clinical examination separately to be declared pass			

3. The standard Task Oriented Assessment of Clinical Skills (TOACS) examination will consist of 10 stations. A candidate will be there at each station for 5-7 minutes. Details of these are given below;

Station 1	X-rays interpretation	20 marks
Station 2	CT scans interpretation	15 marks
Station 3	ECG interpretation	15 marks
Station 4	Figures/patient pictures for making diagnosis and relevant questioning	15 marks
Station 5	History taking	15 marks
Station 6	Counseling	15 marks
Station 7	Instruments	15 marks
Station 8-13	Clinical scenarios focusing diagnosis, managements and investigations interpretation.	Each station will be of 15 marks. Total 90 marks
Total marks		**200 marks**

4. Two examiners, one internal and one external examiner will conduct short and long case respectively.
5. Each short case will be of 10 minutes duration, 5 minutes for examining the patient and 5 minutes for questioning.
6. Each long case will be conducted in 60 minutes (30 minutes for history taking and clinical examination, and 30 minutes for discussion).

Declaration of result and award of degree

- After the Final Examination, MD Psychiatry degree will be awarded to successful candidate.
- On completion of stipulated training period, irrespective of the result (pass or fail) the training slot of the candidate shall be declared vacant.
- A maximum of three consecutive attempts (availed or un-availed) will be allowed in Final Examination during which the candidate will be allowed to reappear in clinical section, afterward the candidate will have to pass written section again to appear in clinical section.

IME and Final examination difference

IME will be focused on basic concepts while Final examination will focus details.

Examiners

A panel of four examiners will be appointed by the Dean FMTI SZABMU, on recommendation of a Program Director of Psychiatry. Of these two will be from within SZABMMU and two will be external examiners. In case of difficulty in finding an external examiner, the Dean would, on recommendation of Program Director of Psychiatry will appoint any relevant person inside/outside the SZABMU as an examiner. Supervisor of the candidate cannot become internal examiner of candidate. TOACS will be conducted in collaboration with teaching faculty of Psychiatry department PIMS under supervision of Head of Psychiatry. A supervisor cannot examine his/her trainee.

Question bank

Teaching Faculty in Psychiatry up to Associate Professor will contribute to question/TOACS bank mandatorily. Examination Section of the SZABMU will

maintain this bank. Papers will be made from this bank in premises of the Examination Section abiding by relevant rules.

Research- Year Wise Learning outcome

1st Year

At the end of first year of training the trainees should be efficiently able to:

- Discuss the value of research in health service in helping to solve priority problems in a local context.
- Identify, analyze and describe a research problem
- Review relevant literature and other available information
- Formulate research question, aim, purpose and objectives
- Identify study variables and types
- Develop an appropriate research methodology
- Identify appropriate setting and site for a study
- Calculate minimally required sample size for a study.
- Identify sampling technique, inclusion and exclusion criteria
- Formulate appropriate data collection tools according to techniques
- Formulate data collection procedure according to techniques
- Pre-test data collection tools
- Identify appropriate plan for data analysis
- Prepare of a project plan for the study through work plans and Gantt charts
- Identify resources required for research and means of resources
- Prepare a realistic study budget in accordance with the work plan.
- Critically appraise a research paper of any national or international journal.
- Present research papers published in various national and international journals at journal club.
- Prepare a research proposal independently.
- Develop a strategy for dissemination and utilisation of research results.
- Familiarization with application Performa for submission of a research proposal to BASR or IREF
- Familiarization with format of presentations and procedure of presentation and defense of a research proposal to BASR or IREF
- Familiarization with the supervisor, nominated by the Dean and to develop a harmonious rapport with supervisor.

2nd Year

At the end of second year of training the trainees should be efficiently able to:

- Identify and define the basic concepts of Epidemiological measures and biostatistics.
- Formulate and pretest to finalize all the data collection tools for the research projects to BASR or IREF
- Identify and execute proficiently all procedures required for data analysis and interpretation.
- Analyze and interpret the data collected for a research project and draw conclusions related to the objectives of study.
- Write a clear and concise research report (paper for a peer reviewed journal/dissertation) and a summary of the major findings and recommendations for each of the different parties interested in the results.
- Present the major findings and the recommendations of a study to policy-makers managers and other stakeholders to finalize the recommendations.
- Prepare a plan of action for the dissemination, communication and utilization of the findings and (if required) make recommendations for additional future research.
- Critically appraise a research paper of any national or international journal.
- Present research papers published in various national and international journals at journal club.
- Prepare final draft of the research proposal of the Thesis project, requisite to the post graduation degree of trainee, under the guidance of the nominated supervisor.
- Fill in an application Performa for submission of Thesis research proposal to BASR or IREF.
- Present and defend a research proposal to BASR or IREF

3rd Year

At the end of 3rd year of training the trainees should be efficiently able to:

- Revise and rejuvenate all the basic concepts of Epidemiological measures and biostatistics.
- Collect and store high quality information for their research project in an honest and unambiguous way.

- Utilize skills to enter, analyze and interpret the data collected for a research project
- Write a clear and concise research report (research paper for a peer reviewed journal/Thesis) and a summary of the major findings and recommendations for each of the different parties interested in the results.

4Th Year

- Identify and execute proficiently all procedures required for data analysis and interpretation.
- Analyze and interpret the data collected for a research project and draw conclusions related to the objectives of study.
- Write a clear and concise research report (paper for a peer reviewed journal/dissertation) and a summary of the major findings and recommendations for each of the different parties interested in the results.
- Present the major findings and the recommendations of a study to policy makers, managers and other stakeholders to finalize the recommendations.
- Prepare a plan of action for the dissemination, communication and utilization of the findings and (if required) make recommendations for additional future research.
- Critically appraise a research paper of any national or international journal.
- Present research papers published in various national and international journals at journal club.
- Prepare and complete final research thesis/original articles, requisite to the postgraduation degree of trainee, under the guidance of the nominated supervisor.
- Present and defend a research final research Thesis/original article project to concerned authorities.

Research Dissertation:

One of the training requirements for MD Psychiatry trainees is a dissertation to be submitted to SZABMU research cell for approval.

VII- Continuous Internal Assessments (CIA)

Continuous Internal Assessments would be submitted by the supervisor considering the workplace based assessments that will include the following:

- Generic and Specialty specific Competency Assessments
- Multisource Feedback Evaluation
- Assessment of Candidates' Training Log Book.

Synopsis and thesis

Submission/evaluation of synopsis

a. The candidates shall prepare their synopsis as per guidelines provided by the Advanced Studies & Research Board.
b. The research topic must consist of a reasonable sample size and sufficient numbers of variables to give training to the candidate to conduct research, collect and analyze data.
c. Synopsis of research project shall be got approved by the end of the 2nd year of MD program in consultation with the Supervisor and Research Coordinator of SZABMU.
d. The synopsis after review by an Institutional Review Committee shall be submitted to SZABMU for consideration by the Advanced Studies & Research Board, through the Head, Department of Medicine.

Submission of Thesis

1. Thesis shall be submitted by the candidate duly recommended by the Supervisor.
2. The minimum duration between approval of synopsis and submission o thesis shall be one year.
3. The research thesis must be compiled and bound in accordance with the Thesis Format Guidelines approved by SZABMU.
4. The research thesis will be submitted along with the fee prescribed by SZABMU.

Thesis Evaluation

1. The candidate will submit his/her thesis at least six months before completion of training.
2. Thesis along with a certificate of approval from the supervisor will be submitted to the Registrar's office, who would record the date and time at which it is received Registrar Office will get thesis received by Controller of Examinations within five working days of receiving.
3. The Controller of Examinations will submit a panel of eight examiners within seven days for selection of four examiners by the Vice Chancellor. The Vice Chancellor shall return the final panel within five working days to the Controller of Examinations for processing and assessment. In case of any delay Controller of Examination will bring the case personally to Dean FMTI SZABMU.
4. The Supervisor shall not take part in evaluation of thesis.
5. The Controller of Examinations will make sure that the Thesis is submitted to examiners in appropriate fashion and a reminder is sent after every ten days.
6. The thesis will be evaluated by the examiners within a period of six weeks. In case the examiners fail to complete the task within six weeks, Controller of Examinations after two fortnightly reminders will bring this to the notice of Dean FMTI SZABMU in person.
7. In case of difficulty in find an internal examiner for thesis evaluation, the Vice Chancellor would, in consultation with the concerned Head of department and Dean FMTI, appoint any relevant person as examiner in supersession of the relevant Clause of the University Regulations.
8. There will be two internal and two external examiners. In case of difficulty in finding examiners, the Vice Chancellor would, in consultation with the concerned Head of department and Dean FMTI, appoint minimum of three, one internal and two external examiners.
9. The total marks of thesis evaluation will be 400 and 60% marks will be required to pass the evaluation.
10. The thesis will be considered accepted, if the cumulative score of all the examiners is 60%.
11. The clinical training will end at completion of stipulated training period but

the candidate will become eligible to appear in the Final Examination at completion of clinical training and after acceptance of thesis. In case clinical training ends earlier, the slot will fall vacant after stipulated training period.

Learning and Teaching Methods

Following methods of teaching and learning will be employed during training.

- Mandatory Workshops
- Residents will complete mandatory workshops of Research Methodology, Advanced Life Support, Communication Skills, Computer & Internet and Clinical Audit etc.
- Core Faculty Lectures
- Monthly themes lectures by Cardiology, Gastroenterology, Hematology, and Radiology etc.
- Long and short case presentations:
- Seminar Presentation
- Journal Club Meeting (JC)
- Small Group Discussions/ Problem based learning/ Case based learning
- Clinicopathological Conference (CC) and

Grand Rounds

- Evening Teaching Rounds
- Evidence Based Medicine (EBM)
- Clinical Audit based learning
- Peer Assisted Learning
- Morbidity and Mortality Conference
- SEQ as assignments on the content areas
- Skill teaching in ICU, emergency, ward settings & skill laboratory
- Bedside teaching rounds in ward
- Directly Supervised Procedures
- Self-directed learning
- Follow up clinics
- Learning through maintaining log book

- Task-based-learning
- E-learning/web-based medical education/computer-assisted instruction
- Research based learning

Log Book

Generic SZABMU Log Book will be utilized for maintaining record.

Professor Rizwan Taj

Chairperson Psychiatry Department

Dean FMTI, PIMS