

# CURRICULUM OF BEHAVIORAL SCIENCES

## MBBS COURSE

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## **INTRODUCTION**

The basic sciences subject will be covered during first and second year. Anatomy is taught with its clinical application and use in clinical subjects. Due to nature of this subject educational strategies of diverse approaches are employed. Educational resources like videos, biological specimens, microscopy slides, books and journals are used to learn this diverse subject. Early clinical exposure is used for clinical application of anatomy.

First year and second year are divided in three educational terms which conclude at with formative assessment test. End of year is University exam for summative assessment.

## EDUCATIONAL HOURS

Year	Theory	Practical	Total
1st year	25 hours		25
2nd year	25 hours	25 hours	50
3rd year	25 hours	50 hours	75
<b>Total</b>	<b>75 hours in 36 weeks/year</b>	<b>75 hours</b>	<b>150 hours</b>
<b>Professionalism and medical ethics</b>		<b>50 hours</b>	
<b>Strategy</b>	<b>Lectures</b> <b>Problem based learning</b> <b>Small group discussion</b> <b>Case based discussion</b>	<b>Clinical Rotation &amp; ward visit</b> <b>Seminars &amp; CPC</b> <b>Audio video sessions</b> <b>Tutorial / PBL</b>	

# LEARNING OUTCOMES

## AT THE END OF CURRICULUM STUDENT WILL BE ABLE TO

- To ensure the training of dental students in BIO-PSYCHO-SOCIAL MODEL of health care
- To equip the dental student in the use of behavioral sciences principles to enhance his learning skills and help him become an active learner
- To train the dental student in the art and science of effective communication with patients and their families
- To create a sensitivity and understanding of the psychosocial aspects of health
- To inculcate highest standards of dental ethics and character building drawing from the rich dental, cultural and religious heritage

# EDUCATION STRATEGIES

The educational strategies in this curriculum are multiple and aligned with domain of learning and according to the desired outcome

## **Interactive lectures**

One-third of the curriculum will be delivered in a traditional didactic format including PowerPoint presentations and case discussions. Didactic education is considered to be a one-way transmission of material from teacher to learner, we cannot overlook the possibility of meaningful interaction between experts and learners during live lectures. This type of interaction, which allows for immediate clarification of concepts and extension of knowledge, may be particularly important for novice learners who have relatively little exposure to the subject matter, such as our study population.

## **Problem based learning**

A lot of emphasis is on case based discussion. Problem-based learning (PBL) is complex and heterogeneous. A wide variety of educational methods are referred as PBL. These include Lecture-based case, Case based lecture, Case based discussions, Problem or inquiry based and Closed loop or reiterative. Incorporation of case based discussion in teaching enhances the critical thinking and problem-solving skills. It also helps in developing a broader prospective of clinical case scenarios.

## **Small Group Discussion**

Small group discussion provides a unique environment to achieve high standards in medical education. Activation of prior knowledge, exchange of ideas, and engagement at a higher cognitive level are assumed to result in deeper learning and better academic achievements by students.

## **Video sessions**

Pathology is a subject which involves visual learning and formulating concepts. Video assisted learning sessions also provides opportunities to learn gross anatomy.

## **Laboratory Sessions**

Laboratory sessions are important as they provide opportunity for experiential learning in terms of study of slides and identification of tissues

# ASSESSMENT

## MCQ's and SEQ's

Multiple choice question and short essay question test will be used at the end of part of curriculum to assess the learning of knowledge. These all assessment exercises will be formative. The written tests like Multiple-Choice Questions (MCQs) and Short-Essay Questions (SEQs) test formats are used for the assessment of cognitive domain. The MCQs are more objective and essentially select type of item response format. MCQs have a cueing effect, which promotes guessing and leads to higher scores. In addition, writing MCQs of higher cognitive level of problem solving is challenging. On the contrary, the SEQs are more subjective and have a supply or construct type item response format, which does not have any cueing effect and can effectively assess problem solving skills.

## Clinical exam and OSCE

Short case and OSCE will be used to evaluate clinical skills and procedural skills at the ward end of placement. The OSCE is a method of clinical skill assessment, and it has been reported to be appropriate for assessing learning achievement levels in the psychomotor and emotional domains, which are difficult to evaluate with written examinations.

## Viva Voce

Viva voce is used for assessment of knowledge and problem solving ability of students. This method is useful evaluating cognitive domain.

## Assignments

Students of different year will be given assignment of different nature such as research and literature search and surveys

## INTERNAL ASSESSMENT

- i. The weightage of internal assessment shall be 10% of totals marks.
- ii. Continuous internal assessment shall consist of evaluation at the end of each assignments, e.g. stages/sub-stage, class tests etc., attitudinal assessment from educational supervisors.
- iii. Assessment of knowledge, Skills and Attitude shall contribute toward internal assessment. Methods used to assess these domains shall include Multiple Choice Questions of one-best type, Short essay questions, Oral/Viva, and Practical/Clinical examinations.
- iv. The score of internal assessment shall contribute to the score in the final examination, Final university examination of each subject shall contribute 90 to total score, and the candidate shall pass in aggregate.
- v. Proper record of continuous internal assessment shall be maintained.

## **LEARNING RESOURCES**

The department of behavioral science will require following resources for implementation resources:

- Human resource
- Instructors (faculty members)
- Curriculum coordinator curriculum secretary
- Infrastructure
- Lecture hall with AV aids
- Tutorial room with AV aids
- Simulated patients and simulated manikins
- Computers Lab

## **LISTS OF CONTENT RESOURCES**

# CONTENTS MODULES

S.No	Topic
1	<b>Module 1</b> INTRODUCTORY MODULE
2	<b>Module 2</b> Behavioural Sciences principles in enhancing learning, memory and motivation
3	<b>Module 3</b> Ethics
4	<b>Module 4</b> Psychological, Social and Anthropological factors influencing human behaviour in health and disease
5	<b>Module 5</b> Behavioural Sciences in clinical situations and settings
6	<b>Module 6</b> BEHAVIOURAL SCIENCES INTERVENTIONS .
7	<b>Module 7</b> Professionalism
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## IMPLEMENTATION

The curriculum will be spread over 3 year with 36 working weeks each year. During this period student will be exposed to various education strategies to achieve the learning objectives.

### 1st Year.

In this year student will be exposed to principles of behavioral sciences. Workshops and seminars are undertaken to develop understanding of behavioral sciences and its applied aspects.

Theory (Lecture, SGD and PBL)	Practical
25 Hours (36 Weeks)	

### 2nd Year.

In this year student will be exposed to do Field visits, House hold survey, Research Project and Museum to develop understanding of community medicine and its applied aspects.

Theory (Lecture, SGD and PBL)	Practical
25 Hours (36 Weeks)	25 Hours

### 3rd Year.

In this year student will be exposed to do Field visits, House hold survey, Research Project and Museum to develop understanding of community medicine and its applied aspects.

Theory (Lecture, SGD and PBL)	Practical
25 Hours (36 Weeks)	50 Hours

# PROGRAMME EVALUATION

## Purpose of Evaluation

The major goals of the evaluation are to provide information that the students can use to achieve curricular objectives and that the faculty can use to monitor quality of and improve curriculum.

## Design of Evaluation

The evaluation design as only posttest.

## Users of evaluation: students, curriculum faculty, Principal Office

Resources: Curriculum faculty and departmental secretaries. No additional funding

## Evaluation question:

- What percentage of students achieved 75% mandatory attendance?
- What percentage of students achieved pass marks in university exam?
- What are the strengths of the curriculum? What are the weaknesses? How can the curriculum can be improved?

Because of limited resources, the evaluation was kept simple. Data Collection was integrated into the curriculum schedule. The major goals of the evaluation are to provide information that the students can use to achieve curricular objectives and that the faculty can use to monitor quality of and improve curriculum. The evaluation design as only posttest.

## End of curriculum evaluation form:

This will be filled by students and faculty members for evaluation of adequacy with each content was covered, whether they would recommend the curriculum to others and written comments on curriculum strengths, weaknesses and suggestions for improvements.

## Annual Report:

Based on evaluation of the educational programe report will be generated annually and submitted to Medical Educational Department.

## BEVIORAL SCIENCES

Identification of 10 specimens with relevant questions, each carrying 3 marks

CONTENTS	C1	C2	C3	P	A	%AGE
Biopsychosocial model: application of Behavioural Sciences in Medical/Dental Practice	1	1	1		2	5
Psychological growth and development of personality, functions of learning, perception, memory, thinking, emotions	1	1	3			5
Communication skills			3	1	1	5
Counselling: Breaking bad news, Dealing with death and dying in clinical Settings, Crisis Intervention/ Conflict Resolution			1	3	1	5
Provision of Informational care and Improving compliance			2	2	1	5
Psychological Reactions in Health Settings			1	2	2	5
Role of psychosocial factors in health care	1	1	3			5
How to make psychosocial assessment?			2	1	2	5
Effects of Psychosocial factors and stress while dealing with Common Health Conditions, Chronic Pain	2	3	15	5		25
Stress coping techniques: non pharmacological interventions			2	3		5
Ethics and character building	1		5		9	15
Role of mental health in medical and dental Practice	1	1	3			5
Enhancing Learning Skills			5	2	3	10
						100%

## Marks Distribution:

Total Marks	=	200
Written	=	90
MCQs	=	45
SEQs	=	45
Internal Assessment	=	20
Long Case	=	45
Short Case	=	5

9 Short Case, Each Has 9 Marks.

Con- tents	Objectives		Domain	Strategy	Assess- ment
<b>Module 1: INTRODUCTORY MODULE</b>					
1	Introduction to behavioral sciences and its importance in health.	<ul style="list-style-type: none"> <li>Bio-Psycho-Social Model</li> <li>Desirable attitudes</li> <li>Link of Health with Behavioural Sciences (Psychology, Sociology, Anthropology)</li> <li>Importance of Behavioural Sciences in health</li> <li>Correlation of brain, mind and Behavioural Sciences</li> <li>Roles of a doctor/dentist</li> <li>Desirable Attitudes in Medical/ Dental professionals</li> </ul>		LEC/SGD LEC/SGD LEC/SGD LEC/SGD LEC/SGD LEC/SGD LEC/SGD	MCQ/SEQ MCQ/SEQ MCQ/SEQ MCQ/SEQ MCQ/SEQ MCQ/SEQ MCQ/SEQ
2	Understanding Behaviour <ul style="list-style-type: none"> <li>Sensation and sense organs</li> <li>Perception</li> <li>Attention and concentration</li> <li>Memory</li> <li>Thinking</li> <li>Communication</li> </ul>	<ul style="list-style-type: none"> <li>Describe sensation, sense organs/special organs</li> <li>Define perception, what factors affect perception?</li> <li>Define attention and concentration. What factors affect them?</li> <li>Define memory and describe its stages, types and methods to improve it Define thinking; describe its types and theories</li> <li>What is cognition and levels of cognition?</li> <li>Discuss problem solving and decision making strategies</li> <li>Define communication. What are types, modes and factors affecting it? Describe ways to recognize non-verbal cues. Characteristics of a good communicator</li> </ul>		LEC/SGD LEC/SGD LEC/SGD LEC/SGD LEC/SGD LEC/SGD LEC/SGD LEC/SGD LEC/SGD LEC/SGD LEC/SGD	MCQ/SEQ MCQ/SEQ MCQ/SEQ MCQ/SEQ MCQ/SEQ MCQ/SEQ MCQ/SEQ MCQ/SEQ MCQ/SEQ MCQ/SEQ MCQ/SEQ MCQ/SEQ
3	Individual differences <ul style="list-style-type: none"> <li>Personality</li> <li>Intelligence</li> </ul>	<ul style="list-style-type: none"> <li>What are the stages and characteristics of psychological growth and development?</li> <li>Define personality. What are developmental theories of personality? What factors affect personality development?</li> <li>How personality can be assessed? Influence of personality in determining reactions during health, disease, hospitalization, stress</li> <li>Define intelligence and the various types of intelligence. Relevance of IQ and EQ. Methods of enhancing EQ and effectively using IQ</li> <li>What factors affect it and how it can be assessed?</li> </ul>			

Con- tents	Objectives		Domain	Strategy	Assess- ment
<b>Module</b>					
4	<ul style="list-style-type: none"> <li>Stress and stressors</li> <li>Stress management</li> </ul>	<ul style="list-style-type: none"> <li>Define and classify stress and stressors</li> <li>Relationship of stress and stressors with illness</li> </ul>			
5	<ul style="list-style-type: none"> <li>Stress management</li> </ul>	<ul style="list-style-type: none"> <li>Stress &amp; Health</li> <li>Anxiety</li> <li>What are coping skills?</li> <li>What are psychological defense mechanisms?</li> <li>What is conflict and frustration?</li> <li>What is concept of adjustment and maladjustment?</li> <li>Understand patient anxiety / stress</li> <li>Outline psychological theories of pain perception and patients experiences of pain.</li> <li>Treatment adherence and compliance</li> <li>Psychological Techniques including Hypnosis</li> </ul>			
6	<ul style="list-style-type: none"> <li>Interviewing /</li> <li>Psychosocial History</li> <li>Taking</li> </ul>	<ul style="list-style-type: none"> <li>Collecting data on psychosocial factors in Medicine/Surgery/ Dentistry/Reproductive Health / Paediatrics and other general health conditions</li> <li>Define, types of interview and listening</li> <li>Skills of interviewing and listening</li> </ul>			
7	<ul style="list-style-type: none"> <li>Doctor/Dentist-Patient relationship</li> </ul>	<ul style="list-style-type: none"> <li>Discuss the doctor/dentist-patient relationship.</li> <li>What is the concept of boundaries and psychological reactions in doctor/dentist-patient relationship (such as transference and counter transference)</li> </ul>			

Con- tents	Objectives		Domain	Strategy	Assess- ment
<b>Module</b>					
8	<ul style="list-style-type: none"> <li>Medical Ethics</li> </ul>	<ul style="list-style-type: none"> <li>Introduction to Ethics in Health Professionals Hippocratic oath- Do's and Don'ts</li> <li>Responsibilities of health professionals: Core values What is the concept of medical ethics?</li> <li>Interaction with patients &amp; colleagues</li> <li>Standards of Ethical Medical Practice</li> <li>Common ethical dilemmas in dentist/ doctor-patient relations, interaction with families, teachers, colleagues, pharmaceutical industry</li> <li>Rights of patients and doctor (in international law, constitution of Pakistan, PM&amp;DC, Islam)</li> <li>Informed consent</li> <li>Patient confidentiality</li> <li>Disclosure of information</li> <li>Decision making in dental/medical practice</li> <li>Code regarding advertisement of services &amp; publicity</li> </ul>			
9	<ul style="list-style-type: none"> <li>Pain, Sleep, Consciousness</li> </ul>	<ul style="list-style-type: none"> <li>Concept of pain.</li> <li>Physiology of pain, Psychosocial assessment and management of chronic/intractable atypical facial pain. Stages of Sleep, Physiology of consciousness, Altered states of consciousness. Psychological influences on sleep and consciousness, Non-pharmacological methods of inducing sleep, changes in consciousness</li> </ul>			
10	<ul style="list-style-type: none"> <li>Communication skills, Counseling, Crisis Intervention, Conflict Resolution</li> <li>Informational Care</li> </ul>	<ul style="list-style-type: none"> <li>Principles of effective communication, active listening, the art of questioning, the art of listening.</li> <li>Good and bad listener. Counseling: Scope, Indications and Contraindications, Steps, Do's and Don'ts, How to deal with real life crisis and conflict situations in health settings? .</li> <li>Informational Care: A practical method of communication between the dentist/doctor and patient about diseases, drugs, prognosis etc</li> </ul>			

Con- tents	Objectives		Domain	Strategy	Assess- ment
<b>Module</b>					
11	<ul style="list-style-type: none"> <li>Health Psychology</li> </ul>	<ul style="list-style-type: none"> <li>Illustrate the importance of psychological consideration in clinical management of patients.</li> <li>Understand memory and learning and judge the effectiveness of psychological therapies.</li> <li>Understand key concepts in child's social and cognitive development. Describe psychological changes during adolescence and old age and recognize consideration in their clinical management.</li> <li>Understand the concept of stress and personality, describe the association between stress and immune change, evaluate the role of stress, personality and work in etiology of illness.</li> <li>Understand the impact of illness on a patients psychological well-being including the ability to cope and understand the association between psychological stress and physical well being.</li> <li>Understand the role of dentist/ doctor in patient reassurance and allaying anxiety and fear.</li> </ul>			
12	<ul style="list-style-type: none"> <li>Social and Community Perspective</li> </ul>	<ul style="list-style-type: none"> <li>Describe inequalities of health care and the relationship of social class and the experience of health and illness.</li> <li>Explain the term ethnicity, culture and racism and how disease pattern and medical/dental care vary by culture and ethnicity?</li> <li>Understand difference of health experience as explained by gender. Understand the influence of health and illness on behaviour and explain how people behave when they are ill and why lay health beliefs are important in medical and dental practice?</li> </ul>			



Con- tents	Objectives		Domain	Strategy	Assess- ment
<b>Module</b>					
13	<ul style="list-style-type: none"> <li>Application of Behavioural Principles in Health and Disease</li> </ul>	<ul style="list-style-type: none"> <li>Mentally/emotionally handicapped</li> <li>Physically handicapped</li> <li>Chronically ill</li> <li>Homebound</li> <li>Dentally/medically compromised</li> </ul>			

Domain	Level
Knowledge	<b>C1</b> Knowledge <b>C2</b> Comprehension <b>C3</b> Application <b>C4</b> Analysis <b>C5</b> Synthesis <b>C6</b> Evaluation
Psychomotor	<b>P1</b> Observe <b>P2</b> Practice <b>P3</b> Adjust <b>P4</b> Master <b>P5</b> Develop <b>P6</b> Construct
Affect	<b>A1</b> Receiving <b>A2</b> Responding <b>A3</b> Valuing <b>A4</b> Organization <b>A5</b> Characterization