

STUDY GUIDE

Subject of ENT

**Prof. Athar Adnan Uppal
The Department of ENT.**

Lahore Medical and Dental College, Lahore.

1.Departmental Faculty Staff

Name	Designation	Qualification
Dr Athar Adnan Uppal	Professor	MBBS ,FCPS ENT
Dr Saira Zaman	Associate Professor	MBBS ,FCPS ENT
Dr Ayesha Nauman	Assistant Professor	MBBS ,FCPS ENT
Dr Amina Arif	Senior Registrar	MBBS,FCPS,MRCS ENT

2.Introduction

Medical education is a life-long process and MBBS curriculum is a part of the continuum of education from pre-medical education, MBBS, proceeding to house job, and post-graduation. PM&DC outlines the guiding principles for undergraduate medical curriculum and has defined the generic competencies and desired outcomes for a medical graduate to provide optimal health care, leading to better health outcomes for patients and societies. These generic competencies set the standards of care for all physicians and form a part of the identity of a doctor. Each competency describes a core ability of a competent physician. This study guide will give an insight to the students about all these competencies and how to plan their educational activities in the subject of ENT during the period of two years.

Details of the course

Name of the course: ENT
Level of Students: 3rd and 4th-year MBBS
Total No of students: 150 +150
Total No of batches 6+6 (30 students in each batch)
Clinical subjects Coordinator: Prof. Athar Adnan Uppal (ENT)
Student's Coordinator: Two students Selected one each from 3rd and 4th year
This module will run in parallel with other modules

Duration of the course

Total of 150 hours will be spread over a period of two years. 54 hours for whole class activity in the form of interactive lectures and seminars. 96 hours for each clinical batch this will work in clinical wards or community hospitals for a period of 8 weeks (4 days a week for 3 hours daily).

3.Learning outcomes(knowledge, skills, attitude)

General learning objectives

To enable the undergraduates to acquire important knowledge, learn skills and bring change in behaviour enabling them to:

- a. Pick the important ENT ailments in OPD and emergency and treat them or refer if required.
- b. Communicate adequately with the patients, their attendants and society with reference to the disease and its treatment.
- c. Apply therapeutic morals and keep the confidentiality of the patient intact.
- d. Understand the ENT public health problems and know how to prevent these.
- e. Know the effect of systemic diseases on Ear, Nose and Throat.

Specific Learning Objectives

Towards the end of ENT module, the student of fourth year MBBS should be capable to

1. Take adequate history of ear nose & throat diseases.
2. Examine the ear nose & throat adequately

4.Contents of the module (Syllabus)

COURSE CONTENTS9+

NOSE:

- Anatomy and physiology
- History taking and examination
- Diseases of external nose
- Congenital lesions, choanal atresia, meningocoele, encephalocele, trauma, cut nose, fractures, external deformities.
- Diseases of septum

- Epistaxis, DNS, Haematoma, Septal Abscess, Perforation
- Rhinitis Allergic, Atrophic, Hyper-trophic
- Foreign bodies
- V.M.R.
- Polyps; Mucous Ethmoidal, Antrochoanal
- Bleeding polyps
- Foreign body nose
- Rhinolith
- Maggots
- Sinusitis- Acute sinusitis, Chronic sinusitis, complications, Fungal infection of nose and paranasal sinuses
- CSF rhinorrhea
- Tumors- Basal cell carcinoma, Squamous cell carcinoma, Pappiloma, Osteoma
- Headache and its ENT causes

ORAL CAVITY & PHARYNX

- Anatomy and physiology
- History and examination

ORAL CAVITY & PHARYNX: Traumatic, Aphthus, Vincents angina, Agranulocytic, Tuberculous, Malignant ulcers, Thrush, Leukoplakia Behcet's disease and Ulcerative lesions of oral cavity

Acute tonsillitis chronic tonsillitis Peritonsillitis and abscess, Diphtheria, Differential diagnosis of white patch on the tonsil

- Tonsil / oral cavity
- Tumours of tonsil
- Retro-pharyngeal abscess
- Pharyngeal abscess acute/chronic
- Parapharyngeal abscess
- Sleep apnea syndrome
- AIDS
- Ludwig's angina
- Mumps
- Parotitis
- Hypertrophic adenoids
- Nasopharyngeal angiofibroma
- Lymphoma
- Squamous cell carcinoma

- Cleft palate
- Plummer Vinson Syndrome
- Post cricoid tumour
- Pharyngeal pouch

LARYNX

- Anatomy
- Physiology
- History Examination
- Glottic-subglottic stenosis
- Laryngocoele
- Laryngomalacia
- Laryngeal web
- Trauma
- Foreign Body & Infections of Larynx Supraglottis
- Acute laryngitis
- Diphtheria
- Chronic specific laryngitis
- Tuberculosis
- Syphilis
- Leprosy
- Non-specific chronic laryngitis
- Vocal nodules
- Vocal cord paralysis
- Functional Aphonia
- Tumours
- Papilloma larynx
- Polyps
- Carcinoma larynx TNM classification
- Tracheostomy; Indications, Contra indications, Complications, Operation steps and Post op care

EAR

- Anatomy and physiology
- History and examination
- Tuning fork tests. Pure tone audiometry / impedance audio metery
- Pain in the ear
- **External ear:**

- Perichondritis
- Trauma to pinna / Haematoma
- Pre auricular sinus
- Wax ear
- Foreign body ear
- Hyper ostosis
- Neoplasia
- Boil ear
- Fungus
- Acute diffuse otitis externa
- Malignant otitis externa
- Myringitis bullosa
- Traumatic rupture
- **Middle ear / Inner ear**
- Eustachian tube dysfunction
- Otitis media with effusion
- Acute otitis media
- Traumatic perforation of tympanic membrane.
- Chronic otitis media i. Tubo tympanic ii. Mucosal disease iii. Attico antral
- Tuberculous otitis media
- Acute necrotizing otitis media
- Complications of otitis media
- Ototoxicity, Acoustic trauma
- Otosclerosis
- Vertigo, tinnitus
- Meniere's disease
- Facial nerve paralysis
- Sensory neural hearing loss
- Acoustic neuroma
- Deafness; assessment & management (medical, surgical, hearing aids and cochlear implant)

HEAD & NECK

- Thyroglossal cyst / sinus
- Pre auricular cyst / sinus
- D/D of mass neck
- Diseases of salivary glands

INSTRUMENTS

- Myringotomy instruments
- Mastoidectomy instruments
- Myringoplasty instruments
- Walsham's forceps
- Ashe's forceps
- Trocar and Cannula
- Nasal Specula
- Freer Elevator
- Suction Tube (Yankeur's and nasal)
- Luc's Forceps
- Tilley Nasal Dressing Forceps
- Tilley heckle forceps
- Eustachian Catheter
- Endotracheal tube, cuffed, non-cuffed
- Tracheostomy tubes
- Tracheal dilator
- Endoscopes
- Laryngoscopes
- Bronchoscopes
- Oesophagoscopes
- Nasopharyngoscope (Rigid/flexible)
- Endoscopic forceps and suction catheters
- Telescopes
- Adenoid curette
- Boyle Davis mouth gag
- Tonsil holding forceps
- Tonsillar artery forceps
- Tonsil snare
- Knot pusher

PRACTICAL SKILLS:

By the end of the clerkship in the department of ENT, the student should be able to:

1. Obtain an appropriate history.
2. Perform a complete regional examination
3. Identify common E.N.T. Head & Neck problems for a given patient and outline appropriate management plans.

4. Identify problems needing referral to an Otolaryngologist.

General Skills

The students should be able to:

1. Demonstrate the use of the head light for adequate illumination of the nasal cavities
2. Examine the oropharynx and the neck
3. Examine larynx by indirect laryngoscopy
4. Examination of postnasal space by posterior rhinoscopy.

SPECIAL SKILLS

1. Use the tongue blade to aid inspection of the oral / cavity.
2. Use the finger palpation examination of the oral cavity and tongue
3. Palpate the neck to assess the lymph-nodes and salivary glands in the neck.
4. Examination of cranial nerves.
5. Identify structures (of the neck, sinuses and ear) on X-ray (MRI, CT Scan)
6. Demonstrate the appropriate use of nasal speculum
7. Demonstrate the use of Otoscope to aid in examination of the external auditory canal and the tympanic membrane.
8. Demonstrate the use of tuning fork and interpret the findings.
9. Interpret pure tone audiometry.

SKILLS LAB

- Airway management, E.T.T intubation, Cricothyrotomy and Tracheostomy.

Observing the Following Operations

- Abscess incision drainage / Haematoma
- Reduction of fracture nose
- Septal correction surgery
- Antral wash out
- Caldwell Luc's operation
- Nasal packing (anterior and posterior)
- Functional endoscopic sinus surgery
- Tracheostomy
- Tonsillectomy
- Adenoidectomy
- Management of obstructed airway
- Foreign body in trachea bronchial tree and larynx
- Surgeries for nasal polyps
- Mastoidectomy

5. Teaching Methodologies and Learning formats

Multiple teaching and learning formats will be used in this module including

- Interactive lectures
- Tutorials /problem-based learning
- Bedside learning
- Ward rounds → presentation of cases and observations
- OPD → Practical training for basic skills
- Case-based learning in the clinical meetings and discussions
- Community-based learning
- Operation Theatres
- Skills of sterilization to be learned and practiced
- Observations of major procedures,
- Emergency duties

6. Learning Resources

1. Text book of ENT by Logan Turner. Latest edition.
2. Diseases of ENT by Dhingra. Latest edition.
3. Text book of ENT By Masud.
4. Oxford Hand book of ENT by Prescott.
5. Online journals and Reading materials through HEC Digital library Facilities.
6. Video tapes of clinical skills and surgical procedure are available in IT library.
7. Skills lab will provide the simulated learning experience of basic skills and procedures
8. Computer and Internet resources to gather the latest information.
9. The students are provided with many educational facilities like study room equipped with multimedia facilities and internet connection throughout the college campus

RESEARCH PROJECTS

- GENDER DIFFERENCE IN PRESBYCUSIS IN PAKISTAN.
- PREVELANCE OF HOARSENESS AND ETIOLOGIES IN PATIENTS WITH VOICE DISORDERS.

7. The Assessment

Multiple assessment tools will be used during formative and summative assessment as show in the following table.

8. Formative & Summative Exams Rules & Regulation

Type of Assessment	Knowledge	Clinical skills	Attitudes
Formative (Internal) (10% = 20marks) Class test Ward test Log Book	Multiple choice questions (MCQ) Short Answer Questions (SEQ)	Case presentation	Case presentation
Summative (External) (90% =180 marks) End of 4 th year examination by UHS as 3 rd professional MBBS	45MCQs: each having 1mark 9 SEQs: each having 5marks (90 marks)	OSPE (14 stations) including interactive Case Presentation (90 marks)	Case presentation during OSPE

- Theory or knowledge assessment by MCQ and SEQ papers by UHS = 90 marks
- Skills and attitude assessment by OSPE by UHS = 90 marks
- Internal assessment by formative assessment by LMDC = 20 marks
- Total = 200 marks

10 marks of internal assessment will be added each to theory and practical to make the final result by UHS. Minimum of 50% marks are required to pass each theory and practical separately.

9.Timetable of the module (Alignment of activities with study hours)

Topic	Activity	Year	Time (Hours)
Introduction of faculty and ENT department	Discussion and visit of the ward	3 rd year	2
Anatomy and physiology of the ear	Interactive lecture, tutorial with models	3 rd year	3
<i>Symptomatology of ear</i>	Interactive lectures Tutorials OPD discussion	3 rd year	3

<i>diseases</i>			
<i>General examination of ear</i>			
Anatomy and physiology of the nose and paranasal sinuses	Lecture interactive sessions	3 rd year	6
Symptomatology of sinonasal region	Lecture Case discussion in the ward and OPD	3 rd year	6
Anatomy and physiology of oral cavity and oropharynx	Lecture	3 rd year	6
Symptomatology of diseases of oral cavity and oropharynx	Lecture Case discussion OPD and theatre	3 rd year	4
Anatomy and physiology of larynx	Lecture	3 rd year	4
Diseases of larynx	Lecture Case discussion OPD and theatre	3 rd year	6
External ear diseases	Lectures Case discussion Bedside and operation theatre Community-based learning	4 th year	4
Middle ear diseases	Lecture OPD and ward discussion theatre	4 th year	8
Inner ear diseases	Lecture OPD and ward discussion	4 th year	6
S.N.H.L	Lecture OPD and ward discussion	4 th year	4
Management of hearing loss	Lecture OPD and ward discussion	4 th year	3
Larynx laryngeal diseases congenital	Discussion ward/ OPD	4 th year	4
Acquired laryngeal diseases	Lecture and discussion in the ward & OPD	4 th year	4

Laryngeal tumours	Lecture and discussion in the ward & OPD	4 th year	5
Oral cavity lesions	Discussion in the ward/ OPD Ocular lab	4 th year	6
Pharyngeal diseases	Discussion in the ward /OPD Ocular lab	4 th year	8
Pharyngeal tumours	Lecture discussion in the ward & OPD	4 th year	8
Nose and paranasal sinuses congenital	Discussion in the ward & OPD	4 th year	3
Acquired sinonasal diseases	Discussion in the ward & OPD	4 th year	8
Sinonasal tumours	Lecture and discussion in the ward & OPD	4 th year	4
Miscellaneous	Problem Based Learning Lecture Discussion in the ward & OPD	4 th year	10
ENT Emergencies	Emergency department PBL tutorial Discussion on patients	4 th year	10
ENT operations complications and management	Lecture OPD and ward discussion Theatre	4 th year	4
Self-study time			5
Assessment			6
Total			150

10.Counselling

- a. Career Guidance (Prof Dr Athar Adnan Uppal)
b. Psychosocial Counselling (Dr Saira Zaman, Associate Professor)
(Dr Ayesha Nauman,Assistant professor)

