

Being a part of the largest public health programme in India – NTEP – where you can make a difference

Name of Block	Block- II Dept of Pulmonary Medicine
Name of Elective	NTEP
Location	New Medical College Hospital – OPD, CASUALTY, KICU,MDICU Chest Hospital- DRTB and DSTB Ward, NTEP Unit and Lab, Chest OP
Internal Preceptor	Dr Anitha Thilakan, Associate Professor, Dr Sindhu S, Associate Professor, Department of Pulmonary Medicine, Government Medical College, Thirssur
External Preceptor	Dr Thomas George P, HOD, Dept of Pulmonary Medicine, Government Medical College, Thirssur
Learning Objectives	1) Historic aspects of TB control in India and Kerala
	2) Epidemiology of TB in India and Kerala
	3) Diagnosis of TB
	4) Treatment of TB
	5) Special situations in TB, including childhood TB and MDR TB
	6) Management of TB Infection
	7) Research in NTEP
Pre-requisites	Candidate should know the basics of microbiology, pathology and pharmacology of Tuberculosis
No of Students	2
Who might benefit?	Candidates who are likely to benefit from the program include <ol style="list-style-type: none"> 1. Those who wish to learn an ideal mix of clinical medicine with public health 2. Those with career aspirations of working for international agencies like WHO, International UNION 3. Those who wish to take up further studies outside India – the work done in this course would further their admission prospects abroad
Learning Resources	Guidelines on TB from the NTEP Website – www.tbcindia.mohfw.gov.in Guidelines on TB from WHO website - https://www.who.int/health-topics/tuberculosis#tab=tab_1
List of Activities	1) Familiarization with TB epidemiology and TB control / elimination - Seminar presentation and focused group discussion
	2) Observe and learn TB current TB elimination activities – Interaction with NTEP MO, TB HV and Laboratory technician
	3) Observe and learn current status of evaluation of respiratory symptomatics – interview 30 patients with cough >2 weeks in the Pulmonary Medicine OP
	4) Observe and learn vulnerability mapping and prevention – Interview 30 patients with “medium to high vulnerability score” in Pulmonary Medicine and General Medicine wards
	5) Learn data management – Practical exercises on assessing quality of data, program data analysis and data presentation
	6) Learn and perform operational research – pick up one OR topic of interest and finish a short study based on secondary data analysis

	<p>7) Learn future career opportunities in WHO and international NGOs – Interviews over telephone with Medical Consultants working with WHO, International UNION, FIND, Government of India.</p> <p>8) Visit to NTEP Lab -Observe techniques of slide preparation, staining and NAAT Testing and reporting procedures</p> <p>9) Visit to District TB Centre Thrissur-To observe the District level activities of follow up, Patient support activities and logistics provided in NTEP</p> <p>10) Visit to Nodal DRTB Ward-Care of patients and Infection control practices</p>
Log Book Entries	1) Seminars and Focus group Discussions
	2) OP patients interviewed
	3) Hospitalised patients interviewed
	4) Summary of interview of key program staff
	5) Summary of data management exercises
	6) Summary of Operational research performed
Assessment	<p>Log book will be evaluated daily by the preceptor. Short answer MCQ and VivaReport on analysis of program data – assignment</p> <p>Report of short OR</p> <p>Reflections on future job prospects</p>
Outputs expected	<p>Participant will gain clinical skills, public health skills, data management skills and analytical thinking</p> <p>One publication on the operational research performed</p> <p>One conference presentation in Students National Conference on research</p>

Elective learning experience in Block II

Name of Block	Block II
Name of Elective	Dive into the “World of Advanced Interventional Pulmonology” along with basic procedure and ultrasound thorax
Location of hospital lab/research facility	New Medical College hospital Thrissur
Name of internal preceptor(s)	Dr. Muraly CP/ Dr Arjun Chandran
Name of external preceptor(s) if applicable	Dr Thomas George
Learning objectives of electives	<p>At the end of the electives the learner would be able to</p> <ol style="list-style-type: none"> 1) Enumerate different anatomical landmarks during bronchoscopy assessed by a video of simulated case with 90% accuracy 2) Describe the indications, contraindications, complications of Flexible bronchoscopy and rigid bronchoscopy 3) Enumerate the different types of bronchoscopy with compare and contrast 4) Enumerate different diagnostic procedures done during bronchoscopy 5) Enumerate the steps in caring the bronchoscopy 6) Enumerate the indications of ultrasound thorax. 7) Describe how to identify various lung pathology using ultrasound thorax. 8) Enumerate the indications, contraindications of thoracoscopy. 9) Enumerate indications of EBUS(Endobronchial ultrasound)
Number of students that can be accommodated in this elective	2
Prerequisites for elective	Bsic knowledge of anatomy of nose, throat , trachea and bronchii and mediastinum
Learning resources for students	<ol style="list-style-type: none"> 1. Videos 2. Web based self directed learning

List of activities of student participation	<ol style="list-style-type: none"> 1) Knowing the bronchoscope , thoracoscope and accessories 2) Knowing ultrasound machine and various settings. 3) Setting up of interventional pulmonology suite 4) Communicating with the team members 5) Presentation of clinical cases along with radiologic and bronchoscopic findings 6) Hands on training on a manikin 7) Assisting bronchoscopies and procedures
Portfolio entries required	<ol style="list-style-type: none"> 1. Summary of cases seen with bronchoscopic findings . a reflection of learners experience also should be noted. 2. Reflections on the working as a team 3. Major challenges faced during the training
Log book entry required	<ol style="list-style-type: none"> 1. Logbook will be verified by the preceptor 2. Atleast 20 bronchoscopies/ Thoracoscopy / EBUS should be seen 3. At least 20 USG thorax should be seen 4. Atleast 10 cases should be assisted 5. Atleast 5 times hould be done on a manikin 6. A topic Presentation before the faculty
Assessment	<ol style="list-style-type: none"> 1. Simulated video for identification of landmarks 2. OSCE 3. MCQ 4. Short notes
Other comments	

Obstructive airway diseases – Commonest but the trickiest

MANAGEMENT OF COPD & ASTHMA

Name of block: Block 2, department of pulmonary medicine

Name of elective: Obstructive airway diseases – Commonest but the trickiest

Location: New Medical College Hospital – OPD, Ward14, Casualty, KICU

Internal preceptor: Dr Bindu CG

External preceptor:

Learning objectives

- 1) History taking, how to differentiate between Asthma & COPD
- 2) Diagnosis and assessment of COPD: Spirometry, 6minute walk test, CAT score, mMRC score
- 3) Radiology
- 4) Diagnosis, assessment and management of Asthma
- 5) pharmacological and non pharmacological management of COPD,
- 6) Management of exacerbation of COPD and ASTHMA in ER
- 7) Inhalational therapy
- 8) Rehabilitation of COPD patients, Management of stable COPD
- 9) Respiratory failure & ICU management of COPD and Asthma
- 10) Smoking & Understanding issues in smoking cessation
- 11) Oxygen therapy
- 12) Corpulmonale & ABPA

Pre requisites

Respiratory system physiology

Respiratory system pathology

Respiratory system pharmacology

Learning resources

GOLD guidelines (2024)

GINA guidelines

Spirometry ERS guidelines

ERS guideline for COPD rehabilitation

List of activities

1. To make diagnosis of patients with proper history taking
2. To read at least 10 Xray's to identify signs of COPD
3. To do at least 5 spirometry readings.

4. To attend 10 COPD patients in OP & WARD, classify them to groups (GOLD guideline), identify which inhaler and drug to give to each patient
5. To attend 5 asthma patients in OP & WARD, classify them, identify which inhaler and drug to give to each patient.
6. To teach at least 5 patients, the proper use of each inhaler device
7. Interpret ABG readings- 5
8. SDL -Indications of oxygen therapy in COPD
9. SDL- preventive measures to control Asthma
- 10.SDL- Vaccinations in OAD
- 11.SDL- Smoking & smoking cessation
12. 6minute walk test on 1patient

Portfolio entries

Short summary of patients attended everyday

Brief summary of daily activities /observations made

CXR reading

Spirometry assessment

Logbook entries:

- 1.Seminars and focus group discussions.
- 2.Case presentation with diagnosis and, COPD patients attended to in the OPD/Ward
- 3.CAT scoring, 6 MWT,
4. Grouping of COPD based on GOLD guidelines and prescribing appropriate inhalers
5. Case report of 2 patients of Asthma
- 6.X ray findings in patient- 5
- 7.Spirometry reading and interpretation-10
- 8.ABG reading -2
- 9.COPD patients attended to in Casualty, ICU and observations on Ventilator
- 10.Smoking cessation related issues noted.
11. To do CAT scoring of 1 COPD Inpatient
12. To attend 2 COPD patients in ICU, observe use of NIV and invasive ventilation

Assessment: Log book will be evaluated daily by the preceptor.

MCQ and Case scenario-based assessment at the end of posting

