

PRE FINAL M.B.B.S

OTORHINOLARYNGOLOGY

CURRICULUM

Goals

The aim of teaching undergraduate students in Otorhinolaryngology is to prepare them to have adequate knowledge of Otorhinolaryngology in accordance with the institutional goals.

Objectives

1. Knowledge

At the end of the course, the student will be able to:

- a) Diagnose and manage the common ENT diseases and emergencies.
- b) Adopt the rational use of commonly used drugs, keeping in mind their adverse reactions.
- c) Suggest common investigative procedures and interpret their results.
- d) Advise treatment for the hearing handicapped person and deaf.
- e) Prevent the infective diseases like CSOM and Rhinosporodiosis.

2. Skills

At the end of the course the students shall be able to:

- a. Be able to use auroscope, nasal speculum, tongue depressor, tuning fork and head mirror otoscope.
- b. Conduct CPR (Cardiopulmonary resuscitation) and first aid in newborns, children and adults including endotracheal intubation.
- c. Maintain airway (endotracheal intubation / tracheostomy/cricothyroidostomy). Cricothyroidectomy.
- d. Perform syringing of ear.
- e. Do nasal packing for epistaxis.
- f. Perform removal of foreign bodies in ENT.

HIGHLIGHTS:

The curriculum has been designed as per MCI advice. Care has been taken to emphasize clinically oriented teaching of practice of Otorhinolaryngology. The obsolete practical exercises have been eliminated and newer teaching methodologies like Problem Based Learning have been incorporated. An effort has also been made to give more emphasis to the interpretive aspects than technical aspects.

MCI has allocated approximately 70 hours for teaching Otorhinolaryngology and over 8 weeks of 3 hours clinical posting daily spread over 2 semesters which is meant for OP demonstration, Ward clinics, Theatre procedures demonstration including Diagnostic Nasal Endoscopy and techniques of audiological evaluation for Hard of Hearing patients and Electro nystagmography for patients with vertigo. These recommendations have been taken into consideration while designing the curriculum. The allocation of marks for summative examination and internal assessment is as per MCI recommendations.

CURRICULUM:

The theory component would comprise of 70 hrs of didactic teaching which will be vertically integrated as far as possible. It was also decided that the basic medical sciences will be emphasized along with integration of other clinical subjects.

The clinical posting will comprise 120 hrs of OP, Ward and Theatre. It was decided to eliminate obsolete clinical practices and include current clinical practices.

The teaching will include seminars, assignments and problem based learning. (PBL)

As part of learning exercise and to promote self-study, problem based learning (PBL) is to be introduced. These will involve small group discussions and will be part of internal assessment. These will be conducted in three sessions of 2 hrs each.

DETAILED SYLLABUS

I. EAR

1. Bacterial flora, specific antibiotic therapy of upper respiratory infection, including fungal.
2. Surgical anatomy: external, middle and inner ear
3. Physiology of hearing and vestibular function
4. Examination of the Ear, tuning fork test, hearing assessment in children- broad outline.
5. Deafness: types and causes
6. Diseases of the external ear
 - a. Aetiology
 - b. Pathogenesis
 - c. Clinical features

- d. Treatment of
 - (i) Perichondritis
 - (ii) Otitis externa
 - (iii) Cerumen
 - (iv) Foreign body
- 7. Diseases of the Middle ear
 - a. Aetiology
 - b. Pathogenesis
 - c. Clinical features
 - d. Treatment of
 - 1. Acute suppurative otitis media
 - 2. Chronic suppurative otitis media
 - 3. Otosclerosis
 - 4. Cholesteatoma
 - 5. Serous Otitis Media
- 8. Facial Nerve and its disorders
- 9. Audiometry -pure tone: functional examination of inner ear, vestibule, caloric test, positional nystagmus test and ENG.
- 10. Deaf-mutism.
- 11. Meniere's diseases
- 12. Complications of Otitis media-mastoiditis (acute, chronic), lateral thrombosis, Labyrinthitis, Otogenic brain abscess, mastoidectomy-principles.
- 13. National Hearing Conservation Programme.
- 14. Recent advances like BERA, OAE, Cochlear Implants
- 15. Manifestation of AIDS
- 16. Injuries of Ear - Trauma, Barotrauma

II. NOSE AND PARANASAL SINUSES

- 1. Surgical anatomy and physiology of the nose and paranasal sinuses including anomalies.
- 2. Symptoms of nasal diseases.
- 3. Methods of examination of the nose and paranasal sinuses including postnasal examination.
- 4. Diseases of the nasal septum
- 5. Epistaxis and foreign bodies in nose.
- 6. Nasal allergy-nasal polyposis.
- 7. Inflammation of the nose: furunculosis of the nose, acute rhinitis.
- 8. Inflammatory diseases of paranasal sinuses:
 - i. Acute maxillary sinusitis
 - ii. Chronic maxillary sinusitis

- iii. Frontal sinusitis
- iv. Spheno – ethmoidal sinusitis
- 9. Atrophic rhinitis, rhinosporidiosis, rhinoscleroma.
- 10. Outline of management of benign and malignant tumors of nose and paranasal sinuses.
- 11. Diagnostic Nasal Endoscopy & FESS
- 12. Congenital anomalies of nose
- 13. Granulomatous diseases of nose.
- 14. Manifestations of AIDS
- 15. Minor nasal surgeries – proof puncture
- 16. Injuries of nose – CSF rhinorrhoea

III. PHARYNX

1. Anatomy of the pharynx – methods of examination.
2. Diseases of the pharynx.
 - a. Adenoids
 - b. Acute Pharyngitis
 - c. Chronic pharyngitis
 - d. Diphtheritic pharyngitis
 - e. Acute follicular tonsillitis and differential diagnosis
 - f. Chronic tonsillitis
 - g. Tonsillectomy indication
 - h. Peritonsillar abscess
 - i. Retropharyngeal abscess
3. Broad outline of management of juvenile angiofibroma and malignant tumours of oropharynx.
4. Diseases of oral cavity and dentition including dental formula.
5. Injuries – traumatic and blast injuries
6. Foreign Body
7. Manifestations of AIDS
8. Premalignant conditions of oropharynx

IV. LARYNX

1. Anatomy and functions of the larynx and method of examination.
2. Hoarseness of voice, stridor, differential diagnosis of airway obstruction and its management.
3. Inflammatory lesions of the larynx; acute laryngitis.
4. Vocal nodules;
5. Laryngeal diphtheria. Tuberculosis of the larynx and differential diagnosis.
6. Benign and malignant tumors of larynx: classification and management.

7. Broad outline of management of benign and malignant tumors of larynx.
8. Congenital anomalies
9. AIDS manifestations
10. Pre malignant conditions of larynx

V. HEAD & NECK

1. Examination of Head & Neck including lymph node examinations.
2. Congenital disorders of Head & Neck
3. Benign and Malignant Lesions
4. Thyroid gland & diseases.
5. Salivary gland & diseases.

VI. AERO DIGESTIVE TRACT

1. Oesophageal diseases
2. Benign & Malignant lesions of Aero digestive tract
3. Tracheobronchial tree
4. Foreign Bodies of Aero Digestive Tract.

OTORHINOLARYNGOLOGY

UNIVERSITY EXAMINATIONS IN THEORY

EVALUATION

1. There will be four Examiners (Two Internal and two external) for Otorhinolaryngology of Third MBBS part I. The Internal Head of Department would co-ordinate for practical/oral Examinations.
2. The oral examinations will be conducted by all the four examiners, each one examining the candidates in one of the topics prescribed. The topics to be examined by each examiner are to be changed among them every day.
3. The marks awarded by the examiners should be exchanged between themselves and the total marks obtained by each candidate, in practical and oral examinations must be finalized immediately after the examination every day and handed over to the Chairman after the examinations are over for the day by the Internal Head of Department.
4. In all the subjects of III MBBS part I the No. of candidates examined per day shall not normally exceed 30.

BOOKS RECOMMENDED

- K. K. R. - A short practice of Otorhinolaryngology - 3rd Edition
- Tuli - Textbook of Ear, Nose, Throat - 1st Edition
- Dey's Textbook of ENT
- Maqbool - Diseases of ENT
- Logan Turner - ENT Diseases

REFERENCE BOOKS

- Otorhinolaryngology-Scott & Brown.

JOURNALS FOR REFERENCE

- Journal of Otorhinolaryngology (Indian journal)
- Laryngoscope (Foreign)

OPHTHALMOLOGY

CURRICULUM

Goals

The aim of teaching undergraduate students in Ophthalmology is to prepare them to function efficiently and have adequate knowledge in accordance with the institutional goals.

Objectives

1. Knowledge

At the end of training in the subject of Ophthalmology the student shall be able to:

- a) Identify the abnormal conditions of the eye.
- b) Diagnose various eye diseases which are most prevalent in the country.
- c) Manage various eye conditions like conjunctivitis, sty, chalazion and foreign body.
- d) Recognize and give medical treatment of anterior segment disease.
- e) Identify the national objectives and be an active participant in the National Programme for Prevention and Control of blindness.
- f) Recognize the ophthalmic manifestations of systemic diseases.

2. Skills

At the end of the course the students shall be able to:

- a. Determine visual acuity.
- b. Determine field of vision.
- c. Test colour vision.
- d. Take conjunctival swab.
- e. Use of ophthalmoscope
- f. Examine anterior segment of eye.
- g. Remove extraocular foreign body.
- h. Perform epilation of cilia - CRRI
- i. Incise and drain lid abscess - CRRI
- j. Distant direct ophthalmoscopy for diagnosis of cataract.
- k. Syringing of the Naso Lacrimal Duct - CRRI
- l. Attend eye camps - CRRI

HIGHLIGHTS:

The curriculum has been designed as per MCI recommendations. Care has been taken to emphasize clinically oriented teaching of Ophthalmology. The obsolete practical exercises have been eliminated and newer teaching methodologies like Problem Based Learning have been incorporated. An effort has also been made to give more emphasis to the interpretive aspects than technical aspects.

MCI has allocated approximately 100 hours for teaching Ophthalmology over a period of two semesters. 10 weeks of 3 hours clinical posting daily spread over 3 semesters which are meant for OP demonstration, Ward clinics, Theatre procedures demonstration and Dark room practices. These recommendations have been taken into consideration while designing the curriculum. The allocation of marks for summative examination and internal assessment is as per MCI recommendation.

DETAILED SYLLABUS

1. Aetiology, Clinical features and Treatment of

- Conjunctival infections
- Allergies
- Pterygium
- Xerosis
- Trachoma

2. Aetiology, Clinical features and Treatment of

- Corneal ulcer - Bacterial, Fungal, Viral - HSV, HZV, Adenovirus
- Keratomalacia
- Scleral inflammations
- Corneal inflammations
- Allergies

3. Basic Principles Of

- A. Keratoplasty
- B. Eye Donation - Contraindications, Method of enucleation, Eye bank
- C. Corneal blindness

4. Aetiopathogenesis/ Complications of

1. Ectropion
2. Entropion
3. Ptosis
4. Lagophthalmos
5. Symblepharon
6. Lid inflammations

5. Cataract

- a. Aetiology
- b. Clinical features
- c. Diagnosis
- d. Treatment of various forms of cataract

6. Uveitis

- a. Aetiology
- b. Clinical features and
- c. Complications and management of various forms of uveitis

7. GLAUCOMAS

- a. Aetiology
- b. Clinical features and
- c. Treatment of various forms of glaucoma

8. Differential diagnosis of 'Red Eye'

9. PRESBYOPIA

- a. Clinical features
- b. Treatment of various - Refractive errors, Presbyopia

10. Types of ocular trauma, clinical features, complications and management including sympathetic ophthalmia.

11. OPTIC NEURITIS OF PAPHILOEDEMA

- a. Clinical Features and Management of - Optic nerve disorders,
- b. Differentiation of Papilloedema, Optic neuritis.

12. PROPTOSIS

- a. Clinical Feature
- b. Management of Orbital disease, Common causes of proptosis

13. OCULAR MANIFESTATION OF SYSTEMIC DISEASES INCLUDING

- 1. Diabetes
- 2. Hypertension
- 3. Tuberculosis
- 4. Leprosy
- 5. Anaemia
- 6. Pregnancy-induced hypertension
- 7. Aids
- 8. Thyroid
- 9. Bleeding disorders

14. Types of blindness and their causes

15. Ocular side effects of systemic drugs.

16. Objectives of National Programmes of Prevention and Control of Blindness and Trachoma Control Programme.

17. VITREOUS DISEASES

- a. Clinical Features
- b. Principles of treatment of
 - 1. Vitreous diseases e.g.
 - 2. Haemorrhage / degeneration
 - 3. Liquefaction
 - 4. Endophthalmitis

19. Differentiate senile cataract and open angle glaucoma

20. Ocular manifestations of common neurological disorders - especially headache when to refer to an ophthalmologist.

21. STRABISMUS

- a. Symptoms
- b. Diagnosis and principles of treatment of - Strabismus

22. INTRA OCULAR TUMOURS

- a. Retinoblastoma
- b. Melanoma

23. RECENT ADVANCES IN OPHTHALMOLOGY

- a. Types and scope of lasers
- b. Intraocular lens implantation etc -a. Phaco b. SICS
- c. Refractive surgeries-basics

24. Anatomy and Physiology the particular part of the eye will be discussed wherever classes are taken about the clinical diseases of that particular part.

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4. In all the subjects of III MBBS part I the No. of candidates examined per day shall not normally exceed 30.

BOOKS RECOMMENDED

- Parson's Diseases of the Eye
- Basic Ophthalmology (Renu Jogi)
- Text book of diseases of the eye (V. Anand Rao)

REFERENCE BOOKS

- ❖ Clinical Ophthalmology (Jack. J. Kanski)
- ❖ Ophthalmology (Yanoff. Duker)

JOURNALS FOR REFERENCE

- Indian Journal of Ophthalmology
- British Journal of Ophthalmology

COMMUNITY MEDICINE

CURRICULUM

Goals

The aim of teaching undergraduate students in community medicine is to prepare them to function as community and primary care physician in accordance with the Institutional goals.

Objectives

Knowledge

At the end of the course the students shall be able to: -

3.

- a) Describe the health care delivery system including rehabilitation of the disabled in the country.
- b) Describe the national health programmes with particular emphasis on maternal and child health programme, family planning and population control.
- c) List epidemiological methods and describe their application to the communicable diseases in the community and hospital situation.
- d) Apply bio-statistical methods and techniques.
- e) Outline the demographic pattern of the country and appreciate the role of the individuals, family and the community and socio-cultural milieu in health and disease.
- f) Describe the health information system
- g) Enumerate the principles and the components of primary health care and National health policies to achieve the goal of "health for all"
- h) Identify the environmental and occupational hazards and their control
- i) Describe the importance of water and sanitation in human health
- j) To understand the principles of health economics, health administration, health education in relation to community.

4. Skills

At the end of the course the students shall be able to:

- g. Use epidemiology as a scientific tool to make rational decisions relevant to community intervention and individual patient care;
- h. Collect, analyze, interpret and present simple community and hospital based data;
- i. Diagnose and manage common health problems and emergencies at the individual, family and community levels keeping in mind the existing health care resources and in the context of the prevailing socio-cultural beliefs;
- j. Diagnose and manage maternal and child health problems and advise couple and the community on the family planning methods available in the context of the National priorities;
- k. Diagnose and manage common nutritional problems at the individual and community level;
- l. Plan, implement and evaluate health education programme with simple audio-visual aids;
- m. Interact with other members of the health care team and participate in the organization of national health programmes.

3. Integration

Develop capabilities of synthesis between cause of illness in the environment and community and individual health status and respond with leadership qualities to institute remedial measures.

DETAILED SYLLABUS

UNIT - I

History of Medicine

- Medicine through the Ages;
- History of Scientific Medicine;
- Modern Medicine and concepts in Public Health;
- Medical and Health care revolution;

UNIT - II

Concept of Health and Disease

- Changing concept of Health.
- Definition and Dimensions of Health;
- Physical Quality of life Index, Human Development Index. Spectrum and determinants of health.
- Ecology and Responsibility of Health;
- Indicators of Health; Health care characteristics.
- Levels of health care; Health team;
- Multi factorial causation; Natural History of Disease; Risk factors; Risk groups;
- Disease control concept; Concepts of Preventions; models of Intervention.
- Hospitals, Community Medicine; Physician functions; International classification of Diseases.

UNIT - III

Principles of Epidemiology and Epidemiological Methods

Epidemiology- Concepts, Definitions, Aims, Epidemiology Approaches; Measurements in Epidemiology & Tools; International death certificate; standardized Rates; Measurements of Morbidity; Epidemiological methods; Descriptive Epidemiology; Applied Epidemiology; Experimental Epidemiology; uses of Epidemiology; Infectious Diseases Epidemiology; Disease transmission Dynamics; Modes of Disease transmission; characteristics of a susceptible parasiticism of a host; Immunity and immunizing agents, hazards of immunization; Disease prevention and control; Universal Immunization programme; Emporiiatrics; Disinfections procedures; Investigation of an Epidemic;

UNIT - IV

Diseases Screening

Screening-Concepts; Lead-time; Objectives; Uses; Types; Criteria and Evaluation of Screening Tests.

UNIT - V

Epidemiology of Communicable Diseases

Epidemiological basis of smallpox eradication; Epidemiological factors; Clinical diagnosis; Lab investigations; Treatment, prevention and control of chickenpox; measles; rubella; mumps; influenza; Diphtheria; Pertusis; Meningitis; Acute respiratory Infections; tuberculosis; Poliomyelitis; Viral hepatitis; Cholera; Acute Diarrheal diseases; Typhoid fever; Food poisoning; Amoebiasis; Ascariasis; Dracunculiasis; Dengue Syndrome; Malaria; Filariasis; Zoonosis; Rabies. Yellow fever; Japanese Encephalitis; Brucellosis; Leptospirosis; Plague; human salmonellosis; Rickettsial Zoonosis; Scrub Typhus; Murine Typhus; Taeniasis, Hydatid cyst Diseases. Leshmaniasis; Trachoma; Tetanus; Leprosy; Sexually transmitted diseases; Endemic Treponemosis; Endemic syphilis, Yaws ; AIDS; Emerging Infectious diseases; Hospital acquired infections.

UNIT - VI

Epidemiology of non communicable diseases

Problem, risk, natural history and prevention. Epidemiological factors, Epidemicity, risk factors, prevention of following diseases. Coronary Heart diseases; Hypertension, stroke; rheumatic heart disease, cancer, Diabetes; obesity, Blindness; Accidents.

UNIT - VII

Health programmes

Strategy, surveillance, control- malaria, filaria, leprosy, tuberculosis, AIDS, Blindness, Iodine deficiency disorders. Universal Immunization Programme, Reproductive and Child Health, Guinea worm Eradication, kalaazar control, Dengue fever control Programme, Cancer control Programme, Mental health Programme, diabetes control Programme, family welfare Programme, Maximum needs Programme, 20 point Programme.

UNIT - VIII

Demography & Family Welfare

Demography cycle, Demography trends in India, total fertility rate, life expectancy; fertility factors; fertility statistics and trends. Family planning services- scope, health aspects, couple protection, National population policy;

Contraceptive methods, types, advantages, disadvantages, mechanism of action, condoms, Intra-uterine devices, hormonal contraceptives, postcoital contraceptives, Abortion, Medical termination of pregnancy act 1971, natural family planning method, sterilization methods; evaluation of contraceptive methods; community needs assessment programme, post-partum programme; national family planning programme and its evaluations.

UNIT - IX

Preventive obstetrics, paediatrics , geriatrics;

Reproductive & Child Health problems, Anti-natal care, risk approach; Intra-natal care, post-natal care, Neo-natal care, Examinations, At risk infants, Low-birth weight, feeding, growth and development, growth chart, preschool child care, child health problems, under five clinic, rights of child, national policy for children, trends in MCH care, indicators of Maternal and Child Health care, School health services-functions, handicapped children, juvenile delinquency, child Abuse, child guidance clinic, child welfare agencies.

UNIT - X

Genetics and mental health

Health problem of aged and disease prevention. Basic genetics science, mendelian diseases, multifactorial disorders, DNA technology, population genetics, eugenics, genetic counseling, pre natal diagnosis, rehabilitation. Mentally healthy person, poor mental health characteristics, mental diseases types, mental diseases causes, prevention, group mental health services. Alcoholism, Drug addictions - symptoms, causes, prevention, treatment.

UNIT - XI

Nutrition

Nutritients- Proximate principles, vitamins and minerals, Principle foods & nutrients, Nutritional requirements, dietary goals, nutritional diseases-Low birth weight, Protein Energy malnutrition, Vitamin A deficiency, nutritional Aneamia, Iodine deficiency disorder, flurosis, lathyrism. Nutritional factors in cardio vascular diseases diabetes, obesity, cancer, nutritional status assessment, nutritional surveillance and growth monitoring, malnutrition ecology, prevention and social measures, food surveillance, food hygiene, food handlers, food borne diseases, food toxicants, food additives, food fortification, food adulteration, community nutrition programmes, nutrition assessment schedule.

UNIT - XII

Medical Sociology

Social and behavioral sciences, sociology- concepts and terms, psychology- concepts and terms, social psychology, social organizations, family life cycle and stress, family functions. Cultural factors in Health and disease, community, occupational classification, socio-economic status scale, hospital sociology, medical care-industry, Doctor- patient relationship, medical ethics, consumer protection act, interview art, operational research, social problems, social welfare organizations, social economics, Gross national product, social security for workers.

UNIT - XIII

Environment

Environment health objectives, water sources, pollution, Purification of water on large scale and small scale, water quality, criteria, and standards, surveillance of drinking water, water sampling.

- ◆ **Air** composition, indices of thermal comfort, air pollutants, monitoring, health effects, prevention and control, disinfections. Ventilation- standards, types.
- ◆ **Light** good lighting requirements, measurements, natural lighting measurements, lighting standards, biological effects.
- ◆ **Noise** sources, properties, effects and control.
- ◆ **Radiation** sources, types, radiation units, biological effects, protection.
- ◆ **Meteorology** atmospheric pressure- health effects. Air temperature measurements through instruments, heat stress indices, effect, prevention of cold stress effects, global warming, humidity- measurements, instruments. Precipitation- air velocity, wind direction, clouds and weather observation.
- ◆ **Housing** social goals, standards, rural housing, overcrowding, housing indicators, public policy, INDRA AWAS YOJANA.
- ◆ **Waste disposal** hazards, sources and disposal methods.
- ◆ **Excreta disposal** problems, sanitation barrier, excreta disposal methods, sewage composition, health effects, sewage purification, sewage treatment- primary, secondary, effluent disposal, modern sewage treatment methods.
- ◆ **Medical entomology** arthropods of medical importance, arthropod borne diseases, transmission, arthropod control principles. Mosquitoes - life cycle, subspecies, habits, mosquito borne diseases and control measures- anti-larval, anti-adult protection. House flies- life history, habits, diseases transmitted, fly control measures. Sand fly- life history, diseases transmitted, control, tsetse flies- life history, diseases transmitted control, Head and Body louse- life history, diseases transmitted, control. fleas- life history, flea indices, diseases transmitted, control, Ticks and mites- diseases transmitted, control, itch mite- scabies, control. Cyclops- importance, control.

Insecticides types -resistance, anti-rodent measures. Zoo noses - Diseases control.

UNIT - XIV

Hospital waste management

Health care wastes - classification, sources, waste generation, health hazards, treatment and disposal technology method, Medical wastes categories; coloring code of containers of medical waste.

UNIT - XV

Disaster Management

Disaster types, Morbidity pattern, Disaster management response, Preparedness, mitigation. Triage, Epidemiological surveillance and Disease control, Policy development; Man made disaster, International agencies.

UNIT - XVI

Occupational Health

Workers Health occupational hazards- physical, chemical, biological, Mechanical, psycho-social. Occupational diseases, accidents, Sickness Absenteeism, Industrials health problems, Workers health protection, Occupation diseases prevention- Medical, Engineering, legislation. ESI Act-1948, state policy on occupational health.

UNIT - XVII

Health Information and Medical Statistics

Health Information System-requirements, components, Uses, sources-census, registration, Sample Registration System, Notification of diseases, Hospital records, diseases registers, Record Linkage, Epidemiological Surveillance, Health service records, Environmental health data, health man power data, Population surveys, Non-quantifiable information. Statistical data presentation-tabulation, Statistical averages, measures of dispersion, Normal distribution, sampling, tests of significance, correlation and regression.

UNIT - XVIII

Health Communication.

Communication strategies; communication process (Source, audience, content, medium, effect); Communication types, barriers; Health communications function. (Information, Education, motivation, persuasion, counseling, raising morale, health development, organization); Health education - concepts,

Objectives, Health care providers role; health education-Regulatory; service, education. Primary Health care; Health education Models- Medical model, Motivation model, Social Intervention model, Health Education contents; principles, Approaches- Individual, group, mass. Health Educational planning and management; Administration and Organization.

UNIT - XIX

Health Planning and Management

Planning- demands, Resources, Objectives, Pre-planning. Planning cycle- Health situation Analysis, Objectives, Resources, Priorities, Plan writes up, Programming Implementation, Monitoring, Evaluation, Management methods and techniques. Behavioral sciences methods- organization design, personal management, Communication, Information system, Management by Objectives. Quantitative methods- National health policy 2002.

Health Planning Communities- Bhore 1946, Mudaliar 1962, Chadah 1963, Mukerji 1965,1966, Jungalwallah 1967, Kartar sing 1973, Shri Vastau 1975, Rural Health scheme 1977, Health for all 1981.

Planning Communication – Health sector. Health system- Central, State, District, Block, Village. Community Development programme, Health services Evaluation; History of public Health in India.

UNIT - XX

Community Health Organizations

Health care concept, system, primary health care elements, principle, National health strategy-2000. Health status of India- Village level, Sub-center level, PHC level, Community health center. Job function of PHC team, Hospitals- Government, private. Voluntary health Agencies.

➤ *Learning without thought is labour lost*
- Confucius

UNIT - XXI

International Health

Early Institutions. WHO-Objectives, functions, Secretariat, UNICEF-Content, UNDP, FAO, World Bank, USAID, Colombo plan , SIDA, DANIDA; NGO's- Rockefeller, Ford, CARE, International Red Cross, Indian Red Cross.

No.	Lesson content	Teaching Materials for use
Statistics		
1.	Vital statistics, Census, Estimation of inter Censual population	Exercise
2.	Birth and Death Registration Act, Notification of Disease, Birth Rate.	Exercise
3.	Sources and collection of Morbidity data International classification of diseases. Classification of cause of death.	Exercise
4.	Concept of population at risk, Calculation of mortality rate, Crude Death Rate, Specific death rates, Standardization of Death Rates.	Exercise
5.	Infant Mortality rate, Neonatal, Mortality rate, post neonatal Mortality rate, Cause and Significance Perinatal Mortality rate, Maternal mortality rate.	Exercise
6.	Sampling collection of data in community, hospital record system.	Exercise
7.	Tabular presentation, Frequency Table, Normal curve & skewing, Interpretation.	Exercise
8.	Diagrammatic Representation Bar Diagram, Histogram Line Diagram pie charts	Exercise & Demonstration
9.	Measures of central Tendency, Mean, Median, and Mode appropriate use advantages and disadvantages.	Exercise & Demonstration
10	Tests of significance, Correlation & Regression	Exercise & Demonstration
11	Standard Deviation, Standard error Interpretation	Exercise & Demonstration
Environmental		
12	Water sources, Purification of water, Assessment of sanitary quality of water	Exercise
13	Chemical standards for potable water. Interpretation of chemical analysis reports	Exercise

14	Hardness of water & its implication fluorides and Iodine in water	Discussion
15	Disinfections of water with special reference to chlorination available chlorine in bleaching powder	Exercise
16	Bacteriological examination of water recommended standards	Demonstration
17	Refuse & Night soil collection & disposal	Demonstration
18	Water carriage system and Biochemical oxygen demand, disposal of sewage	Demonstration
19	Temperature regulation and comfort Hazards of Exposure to cold and heat measurements	Exercise
20	Mosquitoes and Diseases Transmission methods of control	Demonstration
Entamology		
21	Flea, Louse, Hard and Soft Tick, Mite transmitted methods of disinfections. Use of repellants	Demonstration
22	Flies-House fly, sand fly, Tsetse fly, Fly control & traps. Swatting diseases transmission	Demonstration
Community Diseases		
23	Hookworm, Round Worm, Pinworm, Tape worm, Guinea worm, Dyphylotriasis Cyclops, trichenella spiralis	Demonstration
24	Streptococcal disease, Staphylococcal diseases, Tetanus, Diphtheria, Leprosy, Tuberculosis, Gonorrhoea and other Clinical conditions	Demonstration
25	Immunization, Immunizing Agents UIP	Demonstration
Nutrition		
26	Food articles and their food value balanced diet in physiological States	Demonstration
27	Adulteration of food, Legislation for prevention of adulteration. Food Laboratory and food standard. Diseases associated with Adulteration	Demonstration
Family Welfare		
28	Demography, Age sex pyramid, demographic cycle Demographic gap, eligible couples couple protection rate, fertility rate, Reproductive rate, growth rate	Demonstration
29	Methods Contraception	Demonstration
30	Interpretation of results of chemical Analysis of water-I	Demonstration
31	Interpretation of results of chemical Analysis of water-II	Demonstration
32	Health Education	Video cassette

MBBS- PRACTICALS / CLINICAL TRAINING CLASSES

I) Clinico / Social cases Assessment

Every student shall demonstrate skill in history taking, with particular reference to behavioural, socio economical and environmental factors, clinical examination, diagnosis, management and prevention at individual, family and community level with respect to common diseases / conditions like.

- Tuberculosis
- Leprosy
- Malaria
- Filariasis
- Acute diarrhea
- ARI
- Ante-natal case
- Post-natal case
- Diabetes mellitus
- Hypertension
- Protein energy malnutrition
- Skin Diseases-Scabies, Fungal infection, Psoriasis-Furunculosis
- Vitamin deficiency cases
- Sexually transmitted diseases / HIV Infection
- Obesity / Over weight
- Geriatric case

II) Problem solving exercises

- Epidemiological
- Statistical
- Nutritional
- Environment Health
- Demography

III) Spotters

- Entomology, Parasitology, Bacteriology
- Family planning / Contraceptives
- Public health chemistry / Water
- Vaccines
- Environmental models
- Nutrition
- Health education

UNIVERSITY EXAMINATIONS

SYLLABUS AND MARK DISTRIBUTION THEORY PAPER - I

Unit -1	History of Medicine
Unit -2	Concept of Health& Disease
Unit -3	Principles of Epidemiology and Epidemiological Methods
Unit -4	Diseases Screening
Unit -5	Epidemiology of Communicable Diseases
Unit -6	Epidemiology of Non-Communicable Diseases
Unit -7	Medical Sociology
Unit -8	Environment
Unit -9	Health Information and Medical Statistics
Unit -10	Nutrition
Unit -11	Medical statistics

THEORY PAPER- II

Unit - 1	Health Programmes of Epidemic diseases.
Unit - 2	Demography& Family welfare
Unit - 3	Preventive obstetrics, Pediatrics& Geriatrics.
Unit - 4	Genetics and Mental health.
Unit - 5	Hospital Waste Management
Unit - 6	Disaster Management
Unit - 7	Occupational Health
Unit - 8	Health Communication
Unit - 9	Health Planning & Management
Unit - 10	Community health organization & Programmes.
Unit - 11	International Health

BOOKS RECOMMENDED

- Park's Text Book for preventive and Social Medicine, Edited by K. Park, 19th Edition

REFERENCE BOOKS

- ❖ Oxford text book of Public Health (3 volumes), Edited by Walter W. Holland, Roger Detels & George Knox, 2nd Edition, 2002.
- ❖ Maxcy-Rosenau Public Health and Preventive Medicine Edited by John M.Last, 12th Edition 1986.
- ❖ Preventive Medicine for the Doctor in his Community: An epidemiological Approach. Edited by Hugh Rodman Level and E. Gurney Clark, 3rd Edition,1986.
- ❖ Methods in Biostatistics for Medical Students and Research Workers, by Mahajan BK, 6th Edition, 1997.
- ❖ Bradford Hill's Principles of medical Statistics, by Bradford Hill, 12th Edition, 1991.
- ❖ Short Text book of Priv&Social Medicine, by G.N.Prabhakar, 2002.
- ❖ Survey Methods in Community Medicine, by Abramson, 5th Edition, 1999.
- ❖ Mother & Child care, by V.K.Singh, 1st Edition, 2003.
- ❖ Modern Nutrition in Health & Disease, by Maurice E . Shils, 9th Edition, 1999.
- ❖ Text book for Health Worker, by A.M.Chalkey, 2nd Edition, 2004.
- ❖ Community Medicine-Practical manual, by Kameswara Rao, 1st Edition, 2004

JOURNALS FOR REFERENCE

- ◆ Indian Journal of Community Medicine
- ◆ Indian Journal of Preventive & Social Medicine
- ◆ WHO Bulletin
- ◆ International Journal Epidemiology
- ◆ American Journal of Public health
- ◆ American Journal of Epidemiology