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RAJIV GANDHI UNIVERSITY OF HEALTH SCIENCES, KARNATAKA, BENGALURU
4th T Block, Jayanagar, Bengaluru – 560 041

No. RGU/AUTH/140-SYN/117-2/DCD/2018-19

Date. 13.03.2019

NOTIFICATION

Sub : Regulation and Curriculum of M.Ch Head & Neck Surgery

Ref : Minutes of 140th Syndicate meeting held on 27.02.2019

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In exercise of the powers conferred under section 35 (1) of RGUHS Act 1994, and as per approval of the Syndicate in its 140th meeting held on 27.02.2019, the Regulation and Curriculum pertaining to M.Ch Head & Neck Surgery is notified herewith as per Annexure to this notification.

The above Regulation shall be applicable to the students admitted to the said course during the academic year 2016-17 and onwards.


REGISTRAR

To

The Principals of all affiliated colleges/Institutions conducting Super Specialty Courses

Copy to : -

1. The Secretary to Governor, Governor's Secretariat, Raj Bhavan, Bangalore- 560 001
2. Secretary to Government, Health & Family Welfare Department (Medical Education) Vikasa Soudha, Bangalore- 560 001
3. The Director, Department of Medical Education, Ananda Rao Circle, Bangalore- 560 009
4. Members of Senate/Syndicate/Academic Council
5. PA to Vice-Chancellor/Registrar/Registrar (Evaluation), RGUHS
6. Public Information Officer, RGUHS
7. The Home page of RGUHS website -<http://www.rguhs.ac.in> Authority Section/Fellowship.html
8. Guard file/Office Copy.

REGULATION AND CURRICULUM FOR

M.Ch. Head and Neck Surgery



Rajiv Gandhi University of Health Sciences, Karnataka
4th 'T' Block, Jayanagar, Bangalore - 560 041

REGULATION AND CURRICULUM FOR M.Ch. Head and Neck Surgery

(Annexure to University Notification No. RGU/AUTH/140-SYN/117—I
(DCD) 2018-19 Dated 13.03.2019)

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Rajiv Gandhi University of Health Sciences, Karnataka
Bangalore

Vision Statement

The Rajiv Gandhi University of Health Sciences, Karnataka, aims at bringing about a confluence of both Eastern and Western Health Sciences to enable the humankind “Live the full span of our lives allotted by God in Perfect Health”

It would strive for achievement of academic excellence by Educating and Training Health Professionals who

- ❖ Shall recognize health needs of community,
- ❖ Carry out professional obligations Ethically and Equitably and in keeping with National Health Policy,

It would promote development of scientific temper and Health Sciences Research.

It would encourage inculcation of Social Accountability amongst students, teachers and institutions.

It would Support Quality Assurance for all its educational programmes

Motto

Right for Rightful Health Sciences Education

Rajiv Gandhi University of Health Sciences, Karnataka, Bangalore.

Regulations for Super Speciality Course

M.Ch (Master of Chirurgie)

Head and Neck Surgery

CURRICULUM

RAJIV GANDHI UNIVERSITY OF HEALTH SCIENCES

M.Ch. in Head and Neck Surgery

1 Eligibility for Admission

Candidate seeking admission for M.Ch course in any subject must possess recognised degree of MS (or its equivalent recognised degree) in the subject specified in the regulations of the Medical Council of India from time to time.

2. Obtaining Eligibility Certificate by the University before making Admission

No candidate shall be admitted for any M.Ch course unless the candidate has obtained and produced the eligibility certificate issued by the University. The candidate must make an application to the University with the following documents along with the prescribed fee:

- 1 MBBS and MS pass / degree certificate issued by the University.
- 2 Marks cards of all the university examinations passed MBBS course.
- 3 Attempt Certificate issued by the Principal.
- 4 Certificate regarding the recognition of the medical college by the Medical Council of India.
- 5 Completion of internship certificate.
- 6 In case internship was done in a non-teaching hospital, a certificate from the Medical Council of India that the hospital has been recognized for internship.

- 7 Registration by any State Medical Council and
- 8 Proof of SC/ ST or Category I, as the case may be.

Candidates should obtain the Eligibility Certificate before the last date for admission as notified by the University.

A candidate who has been admitted to M.Ch course should register his / her name in the University within a month of admission after paying the registration fee.

3. Intake of Students: The intake of students to each course shall be in accordance with the ordinance in this behalf.

4. Duration of Study

The courses of study shall be for a period of 3 years consisting of 6 terms.

5. Method of training

The training of M.Ch shall be residency pattern with graded responsibilities in the management and treatment of patients entrusted to his/her care. The participation of the students in all facets of educational process is essential. Every candidate should take part in seminars, group discussions, grand rounds, case demonstration, clinics, journal review meetings, CPC and clinical meetings. Every candidate should be required to participate in the teaching and training programme of undergraduate students. Training should include involvement in laboratory and experimental work, and research studies. Basic medical sciences students should be posted to allied and relevant clinical departments or institutions. Similarly, clinical subjects' students should be posted to basic medical sciences and allied specialty departments or institutions.

6. Attendance, Progress and Conduct

6.1 A candidate pursuing M.Ch course should work in the concerned department of the institution for the full period as a full time student. No candidate is permitted to run a clinic/laboratory/nursing home while studying postgraduate course.

6.2 Each year shall be taken as a unit for calculating attendance.

6.3 Every student shall attend symposia, seminars, conferences, journal review meetings, grand rounds, CPC, case presentation, clinics and lectures during each year as prescribed by the department and not absent himself / herself from work without valid reasons.

6.4 Every candidate is required to attend a minimum of 80% of the training during each academic year of the post graduate course. Provided further, leave of any kind shall not be counted as part of academic term without prejudice to minimum 80% attendance of training period every year.

6.5 Any student who fails to complete the course in the manner stated above shall not be permitted to appear for the University Examinations.

7. Monitoring Progress of Studies

7.1 Work diary / Log Book - Every candidate shall maintain a work diary and record of his/her participation in the training programmes conducted by the department such as journal reviews, seminars, etc. (please see Chapter IV for model checklists and logbook specimen copy). Special mention may be made of the presentations by the candidate as well as details of clinical or laboratory procedures, if any conducted by the candidate. The work diary shall be scrutinised and certified by the Head of the Department and Head of the Institution and presented in the university practical/clinical examination.

7.2 Periodic tests:

In case of degree courses of three years duration (MD/MS, DM, MCh.), the concerned departments may conduct three tests, two of them be annual tests, one at the end of first year and the other in the second year. The third test may be held three months before the final examination. The tests may include written papers, practicals / clinicals and viva voce. Records and marks obtained in such tests will be maintained by the Head of the Department and sent to the University, when called for.

7.3 Records: Records and marks obtained in tests will be maintained by the Head of the Department and will be made available to the University or MCI.

8. Schedule of Examination

The examination for M.Ch courses shall be held at the end of three years. The university shall conduct two examinations in a year at an interval of four to six months between the two examinations. Not more than two examinations shall be conducted in an academic year.

9. Scheme of Examination: M.Ch:

The examination shall consist of theory, clinical/practical and viva voce examination.

9.1 (Theory) (Written Examination): The theory examination shall consist of four question papers, each of three hours duration. Each paper shall carry 100 marks. Out of the four papers, the first paper will be on basic medical sciences. Recent advances may be asked in any or all the papers.

9.2 Practical / Clinical Examination:

In case of practical examination, it should be aimed at assessing competence, skills of techniques and procedures as well as testing student's ability to make relevant and valid observations, interpretation and experimental work relevant to his / her subject.

In case of clinical examination, it should aim at examining clinical skills and competence of candidates for undertaking independent work as a specialist. Each candidate should examine at least one long case and two short cases.

The maximum marks for Practical / Clinical shall be 200.

9.3 Viva Voce: Viva Voce examination shall aim at assessing thoroughly depth of knowledge, logical reasoning, confidence and oral communication skills. The maximum marks shall be 100.

9.4 Examiners: There shall be at least four examiners in each subject. Out of them, two shall be external examiners and two shall be internal examiners. The qualification and teaching experience for appointment as an examiner shall be as laid down by the Medical Council of India.

9.5 Criteria for declaring as pass in University Examination: A candidate shall secure not less than 50% marks in each head of passing which shall include (1) Theory, (2) Practical including clinical and viva voce examination.

A candidate securing less than 50% of marks as described above shall be declared to have failed in the examination. Failed candidate may appear in any subsequent examination upon payment of fresh fee to the Registrar (Evaluation).

10. Number of Candidates per day M. Ch Course: The maximum number of candidates for practical/clinical and viva-voce examination shall be Maximum of 3 per day

Chapter II

GOALS AND GENERAL OBJECTIVES OF POSTGRADUATE MEDICAL EDUCATION PROGRAM

GOAL

The goal of postgraduate medical education shall be to produce competent specialist and /or Medical teacher:

- (i) who shall recognise the health needs of the community, and carry out professional obligations ethically and in keeping with the objectives of the national health policy;
- (ii) who shall have mastered most of the competencies, pertaining to the specialty, that are required to be practiced at the secondary and the tertiary levels of the health care delivery system;
- (iii) who shall be aware of the contemporary advances and developments in the discipline concerned;
- (iv) who shall have acquired a spirit of scientific inquiry and is oriented to the principles of research methodology and epidemiology; and
- (v) who shall have acquired the basic skills in teaching of the medical and paramedical professionals.

GENERAL OBJECTIVES

At the end of the postgraduate training in the discipline concerned the student shall be able to:

- (i) Recognise the importance of the concerned specialty in the context of the health need of the community and the national priorities in the health sector.
- (ii) Practice the specialty concerned ethically and in step with the principles of primary health care.
- (iii) Demonstrate enough understanding of the basic sciences relevant to the concerned specialty.
- (iv) Identify social, economic, environmental, biological and emotional determinants of health in each case, and take them into account while planning therapeutic, rehabilitative, preventive and promotive measures/strategies.
- (v) Diagnose and manage majority of the conditions in the specialty concerned based on clinical assessment, and appropriately selected and conducted investigations.
- (vi) Plan and advise measures for the prevention and rehabilitation of patients suffering from disease and disability related to the specialty.
- (vii) Demonstrate skills in documentation of individual case details as well as morbidity and mortality data relevant to the assigned situation.

- (viii) Demonstrate empty and humane approach towards patients and their families and exhibit interpersonal behaviour in accordance with the societal norms and expectations.
- (ix) Play the assigned role in the implementation of national health programmes, effectively and responsibly.
- (x) Organise and supervise the chosen/assigned health care services demonstrating adequate managerial skills in the clinic/hospital or the field situation.
- (xi) Develop skills as a self-directed learner, recognise continuing educational needs; select and use appropriate learning resources.
- (xii) Demonstrate competence in basic concepts of research methodology, epidemiology, and be able to critically analyse relevant published research literature.
- (xiii) Develop skills in using educational methods and techniques as applicable to the teaching of medical/nursing students, general physicians and paramedical health workers.
- (xiv) Function as an effective leader of a health team engaged in health care, research or training.

STATEMENT OF THE COMPETENCIES

Keeping in view the general objectives of postgraduate training, each discipline shall aim at development of specific competencies, which shall be defined and spelt out in clear terms. Each department shall produce a statement and bring it to the notice of the trainees in the beginning of the programme so that he or she can direct the efforts towards the attainment of these competencies.

COMPONENTS OF THE PG CURRICULUM

The major components of the PG curriculum shall be:

- i) Theoretical knowledge
- ii) Practical/clinical Skills
- iii) Attitudes, including communication.
- iv) Training in research methodology.

Source: Medical Council of India, Regulations on postgraduate medical education, 2000.

Chapter III

M. Ch. in Head and Neck Surgery

Course Description

Goals

The Head and Neck Surgery differs from his colleagues in general surgery and otorhinolaryngology in several respects. With rapid advances in surgery, radiation, medical oncology, and new disciplines such as Microvascular surgery, Minimally invasive Endoscopic surgery, laser and Trans-oral robotic and remote access thyroid robotic surgery, the Head and Neck Surgery is in a critical position to help integrate these approaches to the management of an individual patient. It is likewise critical that the Head and Neck Surgeon have special training that makes it possible for him or her to understand these divergent fields and appreciate their potential roles in treatment. The Head and Neck Surgeon should take the responsibility for training new residents and educating the general surgical staff of their hospitals and medical schools to better define the concepts and indications of advances in cancer diagnosis and management.

The Head and Neck Surgeon should be involved with clinical and basic science research activities in oncology and should help to organize clinical protocols for the study of cancer patients. Management of each patient's care should be coordinated with medical oncologists, radiation therapists, and other disciplines in the practice of medicine as needed, to establish the highest possible standards of care for treatment of cancer. Finally, Head and Neck Surgeon must lead fellow surgeons who remain the primary treatment source for most patients with malignant disease. Such leadership includes establishment of protocols for research, convincing colleagues that patients should be entered into clinical trials and other studies, helping to explain the results of such trials, and being critical of ineffective or poorly conceived studies. Thus, the Head and Neck surgeon will both direct and stimulate better investigation, treatment, and provide a critical viewpoint as new and innovative management approaches come to the clinical arena.

Cancer Prevention

Head and Neck region constitute about 30% of all cancer in males & females and most of these cancers are Preventable. Most are squamous cell carcinomas. Use Tobacco and or drink Alcohol excessively are much more likely than others to develop the disease.

Head and Neck Surgeon have a special obligation among physicians to educate the public, including other professionals with a less intense interest in cancer prevention.

Clinical Research

No cancer is so well treated that an improvement in outcome or therapeutic approach cannot readily be imagined. Thus, research is imperative. Furthermore, therapies that allow preservation of the involved organ are much to be desired, and investigations that have led to Organ preservation protocols in larynx and hypopharynx in many patients. Although in these instances it would appear self-evident, measuring the quality of life is now quantitatively valid and has added a major opportunity to each value judgment.

Every oncologist's office should be a research station. Every oncologist during his or her training be exposed to, and almost always be a participant in, clinical research. Virtually no regimen or treatment for any tumor is entirely satisfactory. There is much reason to anticipate that progress would be more rapid if clinical research were accepted as an integral part of the practice of medical oncology so that more oncologists and patients would participate than at present. The technology exists in medical informatics for community oncologists to ally themselves with their alma mater or other academic centers to participate in diagnostic, preventive, and therapeutic research trials using the computer, e-mail, and fax as expedient tools. As a part of the commitment to medical oncology, a medical oncologist should reserve a certain number of hours per week for participation

in clinical research. This has the virtue of maintaining greater currency with ongoing investigation. Clinical investigation should serve as the bridge to fundamental science and the excitement in the new molecular biologic understanding of the cancer cell. A set-aside for research, however, constitutes the same imperative commitment as a set-aside for education and updating.

Objectives:

The following objectives are laid out to achieve the goals of the course. These objectives are to be achieved by the time a candidate completes the course. The Objectives may be considered under the subheadings

Knowledge

Skills

Human values, Ethical practice and Communication abilities

Knowledge

- Describe etiology, patho-physiology, principles of diagnosis and management of malignancies including emergencies, in adults and children.
- Demonstrate understanding of basic sciences relevant to this specialty
- Identify socio-economic, environmental and emotional determinants in each case, and take them into account for planning therapeutic measures.
- Describe indications and methods for blood transfusion and pheresis.
- Recognize conditions that may be outside the area of his specialty/competence and to interact with other disciplines.
- Update oneself by self-study and by attending courses, conferences and seminars relevant to the specialty.
- Teach and guide his team, colleagues and other students.
- Undertake audit.
- Use information technology tools and carry out research, both basic and clinical, with the aim of presenting or publishing his/her work in various scientific forum or journals.

Skills

- Take a proper clinical history, examine the patient, perform essential diagnostic procedures and order relevant tests and interpret them to come to a reasonable diagnosis & staging of disease.
- Perform common procedures relevant to the specialty.
- Undertake complete monitoring of the patient.

Attitude and Communication Abilities

- Adopt ethical principles in all aspects of his/her practice. Professional honesty and integrity are to be fostered. Care is to be delivered irrespective of the social status, caste, creed or religion of the patient.
- Develop communication skills, the skill to explain various options available in management and to obtain a true informed consent from the patient & breaking of bad news.
- Provide leadership and get the best out of his team in a congenial working atmosphere.
- Apply high moral and ethical standards while carrying out human or animal research.

- Be humble and accept the limitations in his knowledge and skill and to ask for help from colleagues when needed.
- Respect patient's rights and privileges including patient's right to information and right to seek a second opinion.

Course Contents and Details of the core curriculum

Didactic lectures and seminars

1st Semester

A) Basic Sciences

- I. Cancer Biology
- II. Molecular Biology
- III. Cell Proliferation, Differentiation, and Apoptosis
- IV. Growth Factor Signal Transduction in Cancer
- V. Oncogenes
- VI. Tumor Suppressor Gene Defects
- VII. Biochemistry of Cancer
- VIII. Invasion and Metastases
- IX. Tumor Angiogenesis
- X. Tumor Immunology
- XI. Cancer Etiology
- XII. Genetic Predisposition to Cancer
- XIII. Chemical Carcinogenesis
- XIV. Hormones and the Etiology of Cancer
- XV. Ionizing Radiation
- XVI. Ultraviolet Radiation Carcinogenesis
- XVII. Physical Carcinogens
- XVIII. Trauma and Inflammation
- XIX. Tumor Viruses
- XX. Herpesviruses
- XXI. Papillomaviruses
- XXII. Hepatitis Viruses
- XXIII. Cancer Epidemiology
- XXIV. Applied Head and Neck anatomy

B) Clinical subjects

1. Lip and oral cavity
2. Oral mucosa in health and disease
3. Benign cysts and tumors of the jaw
4. Management of Mandible
5. Oropharynx
6. Paranasal sinus
7. Parapharyngeal space

2nd Semester

C) Theory and Practice of Clinical Trials

- I. Theory and Practice of Clinical Trials
- II. Clinical Research Methods
- III. Developing hypothesis and planning research project

- IV. Designing a clinical research project
- V. Data collection and monitoring
- VI. Ethics in biomedical research

D) Clinical subjects

- 1. Hypopharynx
- 2. Supraglottic Larynx
- 3. Glottic Larynx
- 4. Salivary gland
- 5. Anterior skull base
- 6. Temporal bone

3rd Semester

E) Cancer Prevention

- I. Prevention of Tobacco-Related Cancers
- II. Nutrition in the Etiology and Prevention of Cancer
- III. Screening for Head and Neck Cancer

F) Pharmacology

- I. Chemo-prevention of Cancer
- II. Cytokinetics
- III. Drug Resistance and its Clinical Circumvention
- IV. Principles of Dose, Schedule, and Combination
- V. Toxicology by Organ System

G) Clinical Topics

- I. Management of Neck
- II. Thyroid and parathyroid
- III. Basic principles of Head and Neck Reconstruction
- IV. Free microvascular tissue transfer flaps for Head and Neck Reconstruction
- V. Local flaps for Head and Neck defects
- VI. Regional flaps for Head and Neck Defects
- VII. Reconstruction of soft tissue defects of face
- VIII. Nose reconstruction
- IX. Lips reconstruction

4th Semester

H) Principles of Medical Oncology (Chemotherapy)

- I. Folate Antagonists
- II. Pyrimidine and Purine Antimetabolites
- III. Alkylating Agents and Platinum Antitumor Compounds
- IV. Anthracyclines and DNA Intercalators /
- V. Epipodophyllotoxins / DNA Topoisomerases
- VI. Microtubule-Targeting Anticancer Drugs Derived from Plants and Microbes: *Vinca* Alkaloids, Taxanes, and Epothilones, Asparaginase
- VII. Newer Chemotherapeutic agents
- VIII. Palliative chemotherapy in head and Neck Cancer
- IX. Metronomic therapy in Head and Neck Cancer

I) Clinical Topics

- I. Oral cavity reconstruction
- II. Mandible reconstruction
- III. Pharynx reconstruction

- IV. Skull base reconstruction
- V. Specialized care of the terminally ill
- VI. Nutritional support.

5th Semester

J) Cancer Screening and Early Detection

Head and Neck Cancer Screening and Early Detection

K) Principles of Cancer Pathology

Principles of Head and Neck Cancer Pathology

L) Principles of Head and Neck Imaging

- a. Imaging Cancer of Unknown Primary Site
- b. Imaging Neoplasms of the Head and Neck
- c. Ultrasound in Neck malignancy
- d. Radionuclide Imaging in Cancer Medicine
- e. Interventional Radiology for the Head and neck lesions

M) Principles of Radiation Oncology

- a. Physical and Biologic Basis of Radiation Oncology
- b. Principles of Head and Neck Radiation oncology
- c. Brachytherapy for Head and Neck lesions
- d. Intra- operative radiation in Head and Neck tumors
- e. Re irradiation in Head and Neck Tumors
- f. Photodynamic Therapy of Head and Neck Cancer

N) Principles of Psycho-Oncology

- a. Principles of Head and Neck Surgical Nursing

O) Principles of Rehabilitation in Head and Neck Surgery

- a. Principles of Head and Neck Cancer Rehabilitation
- b. Prosthetic rehabilitation
- c. Speech and swallowing therapy
- d. Tracheo-esophageal prosthesis

P) Principles of Multidisciplinary Management

- a. Principles of Multidisciplinary Management Head and Neck

Q) Principles of Societal Oncology

- a. Ethical Aspects of Caring for Patients with Head and Neck Cancer
- b. Legal Aspects of Head and Neck Cancer
- c. Clinical Head and Neck Oncology in a Changing Health Care Environment
- d. Outcomes Assessment of Head and Neck Cancer

R) Neoplasms of the Central Nervous System

- a. Neoplasms of the Central Nervous System, Skull base and scalp

S) Neoplasms of the Eye and Orbit

- a. Neoplasms of the Eye

T) Neoplasms of the Endocrine Glands

- a. Pituitary Neoplasms
- b. Neoplasms of the Thyroid
- c. Neoplasms of the Adrenal Cortex
- d. Neoplasms of the Neuroendocrine System

U) Neoplasms of the Head and Neck Skin, Scalp

- a. Neoplasms of the Skin

V) Malignant Melanoma

- a. Malignant Melanoma

W) Neoplasms of the Bone and Soft Tissue of Head and Neck

- a. Bone Tumors of mandible and maxilla
- b. Soft tissue Sarcomas of Head and Neck

X) Neoplasms of the Hematopoietic System

- a. Hodgkin's Disease
- b. Non-Hodgkin's Lymphomas
- c. Plasma Cell Tumors

Y) Neoplasms of the Alimentary Canal

- a. Neoplasms of the Esophagus

Z) Head and Neck Neoplasms in AIDS

- a. Neoplasms in Acquired Immunodeficiency Syndrome

AA) Neoplasms of Head and neck with Unknown Primary Site

- a. Neoplasms of Unknown Primary Site

BB) Neoplasms in Children

- a. Principles and Practice of Pediatric Head and Neck Oncology
- b. Incidence, Origins, Epidemiology Head and Neck tumors
- c. Principles of Pediatric Head and Neck Radiation Oncology
- d. Late Effects of Treatment of Head and Neck Cancer in Children and Adolescents
- e. Hodgkin's Disease in Children and Adolescents
- f. Non-Hodgkin's Lymphoma in Children
- g. Germ Cell Tumors Head and Neck
- h. Neuroblastoma
- i. Head and Neck Soft Tissue Sarcomas of Childhood

CC) Complications of Cancer and its Treatment

- j. Management of Cancer Pain
- k. Anorexia and Cachexia
- l. Antiemetic Therapy
- m. Neurologic Complications
- n. Dermatologic Complications
- o. Skeletal Complications
- p. Hematologic Complications
- q. Blood Bank Support
- r. Coagulopathic Complications of Cancer
- s. Urologic Complications
- t. Cardiac Complications
- u. Respiratory Complications
- v. Liver Function and Hepatotoxicity in Cancer
- w. Gastrointestinal Complications
- x. Oral Complications
- y. Gonadal Complications
- z. Endocrine Complications

DD) Infections in Patients with Cancer

- a. Infections in Patients with Cancer
- b. Head and Neck Neoplasms in Tuberculosis

EE) Oncologic Emergencies in Head and Neck Surgery

Oncologic Emergencies

Clinical training

Includes daily attending ward rounds seeing patients in ward preoperative, post-operative surgical cases, Seeing the patients in OPD new and follow up patients and interacting with senior consultants, attending patients in Minor OT, and in Day care ward, daily patient management including the patients in the ICU, management of patients on radiotherapy and chemotherapy and palliative care for advanced head and neck malignancy patients.

List of Surgical Procedures in Head and Neck Surgery and Oncology

Larynx

- Conservative procedures

 - Open

 - Endoscopic

- Near total Laryngectomy

- Total Laryngectomy

- Total laryngopharyngectomy

- Gastric pull up

- TEP-

 - Primary

 - Secondary

Maxilla

- Partial maxillectomy

- Total maxillectomy

- Orbital exenteration

Oral cavity/Oropharynx

- Lip lesions

- Access mandibulotomies

- Marginal resections

- Segmental resections

- Tongue/ fom /

- cheek resections

Neck

- Functional Neck Dissection

- Modified Radical Neck

- Radical Neck dissection

Skull base/ craniofacial

- Anterior

Thyroid

- Partial/Total

- Total

Parotid

- Superficial/Total

Reconstructions

- Minor flaps
 - Forehead flap
 - Pec major
 - D-P flap
 - Others (LD/Trap)
- Free flaps raising
 - Fibula
 - RFF
 - Lat arm
 - DCIA
 - Rectus
- Free flaps
 - Recipient vessel
 - Preparation
 - Anastamosis Vein
 - Anastamosis artery
 - Nerve grafts
- Other procedures
 - Jejunostomy/
 - Gastrostomy
 - Central lines
 - Stomoplasty
 - Laser Surgeries
 - Skin grafts
- Excision of submandibular gland tumors
 - Wide excision & reconstruction of scalp tumor & other skin tumor of Head and Neck

Compulsory Academic activities

- Topic presentation in department - 12 in three years
- Journal club reviews - 12 in three years
- Attendance /Presentation of papers in National head and neck meetings
Once every year
- Publications - Two in three years
- Research activities - participation in one laboratory research
project and one clinical trial

Tumor board meetings once a week.

All trainees will be required to maintain a log book of cases worked up, assisted, performed, planned RT, administered Chemotherapy and palliative care cases attended to. Also, the activity records in terms of the compulsory academic activities must be maintained.

Teaching & Learning Activities:

Procedures:

Principles of Head and Neck Surgical Oncology

1st Year : Endoscopic Procedures Diagnostic Therapeutic nasal endoscopy, Direct laryngoscopy, Hypo- pharyngoscopy Observing & Assisting Major Surgical procedures & performing minor surgical procedures independently

2nd Year: Observing & Assisting Major Surgical procedures & Performing major surgeries with assistances from seniors faculty

3rd Year: Observing & Assisting Major Surgical procedures & performing major surgical procedures independently under supervision from faculty

Service rounds: Students should do every day care of the patients. Newly admitted patients should be worked up & presented to the seniors during the morning rounds.

Teaching Rounds: every unit should have grand rounds once a week for teaching purpose.

1st year students are expected to present the case. All faculty members are supposed to be present on rounds & impart positive discussion. Entries should be made in logbook.

Journal Review Meeting:

Journal Review should be held once a week. All students are expected to attend and actively participate in discussion and enter in logbook the relevant details.

All the students are expected to present articles of recent interest & clinical weightge by turn.

A timetable with name of student and moderator should be announced before hand. A record of the presentations made should be entered in logbook.

Multi-Disciplinary Seminars:

Seminars should be made once a week. All students should by turn present seminars. At other times he is expected to actively attend the seminars. A list of name of student with topic and moderator should be submitted beforehand. Should enter the presented seminars in logbook.

Clinico Pathological Conference:

It is recommended once a month and all students are expected to present cases of interest by turn. Active participation by hematologist and pathologist is recommended. Prior intimation of case by students to faculty members is expected. Such meetings should be entered into logbook.

Interdepartmental Meeting:

It is strongly recommended once a week especially with dept. of Radio-diagnosis, dept of Pathology and Dept. of Microbiology. Either case presentations or a topic of common interest can be actively discussed.

Community Work/Field Visits:

They are recommended once a month especially on Saturday. They should undertake awareness programs regarding early detection of malignancies.

Others:

Lectures – Lectures are recommended for different topics as

- Basic Sciences
- Bio-statistics & Research tools
- Clinical Trials

A student must be familiar with use of Library, Computer network, Internet, PDQ etc.

A student should be actively involved in teaching nursing students, undergraduate and postgraduate students.

MCh students are encouraged to learn about clinical research by interacting with clinical investigators if any clinical trial is going on in the institution.

CME Programme

National level conference – 1 each year

State level Conference - 1 each year

Rotation and Posting in Other Departments same institute Not excluding 2 Months

Name of service/dept	Duration
GIS Services –	2 weeks
Medical Oncology –	2weeks
Radiation Oncology	2weeks
Pathology & cytogenetics –	1 week
Endoscopy –	1 week
Nuclear Medicine –	1 week
Radiology –	1 week
Pain relief & Palliative care –	1 week

Candidate will be sent to other institutes in India and out of India for special Training where there are facilities for subspecialty work in following fields Not extending 4 months

Skull base, Laser Surgery, Free Microvascular reconstruction in Head and neck defects, Robotics surgery Head and neck Surgery, Endoscopic skull base Surgery, Thoracic Surgery

Any of the Following referral center may be considered

Amrita Institute of Medical Science, Kochi, Tata Memorial Hospital, Mumbai, NIMHANS, State University of New York at Buffalo, Memorial sloan kettering cancer center,

Log Book

The logbook is a record of the important activities of the candidates during his training, internal assessment should be based on the evaluation of the log book. Collectively, logbooks are a tool for the evaluation of the training programme of the institution by external agencies. The record

includes academic activities as well as the presentations and procedures carried out by the candidate.

Every student must maintain a record book (diary/log book) and the work carried out by him and the training programme undergone by him during the training, including details of rotation, night calls, procedure and consultations done as MCH. candidates. These record books should be checked and assessed by faculty members imparting the training and certified by the head of the department.

Student diary should include following activities.

1. Cases seen on rounds – description of interesting cases and other miscellaneous topics discussed.
2. Out patient cases seen and details of interesting cases with follow up.
3. Procedures done on inpatients and outpatients and consultation done.
4. Undergraduate teaching done during the day with details.
5. Training programs attended – details of bedside clinics, basic sciences, subject and clinical seminars, Journal clubs, mortality meet and hospital conference.
6. Night duties – details of patients managed and emergencies, consultation, ward calls attended.
7. Details of study with topics covered during off-hours in library / home. Periodicals and Journals reviewed with notes on interesting articles.

Research Training

The candidate is introduced to the field of research in medical oncology both at the clinical and Lab level. The candidate is required to work on two projects. In addition, at least two presentations/Publications at state /national / international level conferences / Journals.

Evaluation

Internal: The candidate will be guided and judged as regards his/her abilities to provide competent care to his patients through various means like ward rounds, discussions held in OPD and weekly academic activities. Internal examination in the form of written examination will be held every year in the month of August with an objective type of questionnaire.

Scheme of Examination

There shall be four question papers, each of three hours duration. Each paper shall consist of 12 question each carrying 10 marks. The candidate must attempt 10 questions total marks for each paper will be 100. The distribution of questions in each paper will be as follows.

Paper I: Basic Sciences, includes Cancer Biology, Tumor Immunology, Cancer Etiology, Pharmacology, Radiation Biology, Tumor Pathology.

Paper II: Principles of Head and Neck Surgical Oncology, Reconstructive Surgery (Oral cavity, Para Nasal sinus, Orbit, Ear, Skull base,

Paper III Principles of Head and Neck Surgical Oncology, Reconstructive Surgery (Oropharynx, Hypopharynx, Larynx, Thyroid, Parathyroid, Salivary lesions, Para pharyngeal space lesions, Neck, Trachea, Air way, Pediatric Tumors)

Paper IV: Chemotherapy, Radiotherapy Clinical Trials, Recent advances, Prevention, psycho-oncology, Rehabilitation, societal Oncology, Locoregional flaps, Free flaps,

Clinical Examination: Marks: 200

To elicit competence in clinical skills: One long case, two short cases and ward rounds

Viva voce: Marks = 100

All examiners will conduct viva – voce conjointly on candidate’s comprehension, analytical approach, expression and interpretation of data. It includes all components of course contents, in addition candidates may be also be given case reports, charts, gross specimens, Histo-pathology slides, X-rays, Ultrasound, CT scan images, etc, for interpretation. Questions on use of instruments will be asked. It includes discussion on Research also.

Maximum marks

Theory	Practical	Viva	Grand total
400	200	100	700

Recommended Books & Journals

Books for Reading

1. Operative Otolaryngology E-Book: Head and Neck Surgery By Eugene N. Myers, Carl H. Snyderman
1. Surgery of the Thyroid and Parathyroid Glands 2nd Edition by Gregory Randolph
2. Comprehensive Management of Head and Neck Tumors, THAWLEY.S.E et al
3. Basal & Squamous Cell skin Cancer of the Head and Neck, Weber., R. G. et. al
4. Salivary Gland Disorders Editors: Myers, Eugene N., Ferris, Robert L. (Eds.)
5. Essentials of Head & Neck Oncology, CLOSE. L.G.
6. Head & Neck Cancer: A Multidisciplinary Approach, HARRISON.L.B.
7. Complications in Head & Neck surgery, OSSOFF.R.H.
8. An Atlas of Head & Neck surgery, LORE, J, M.
9. Management of Head & Neck Cancer: Multidisciplinary Approach. MILLION. C.R
10. Color atlas of Head & Neck surgery Face. Skull & Neck, SHAH. J.P
11. Color atlas of operative technology in Head and Neck Surgery, Parotid. Soft tissue and reconstructive surgery, SHAH.J. P
12. Surgery for cancer of the larynx and related structures, SILVER E.E
13. Multimodality Therapy for Head and Neck Cancer, SNOKS. G.B.

Oral Oncology

1. Burket's oral Medicine: Diagnosis and Treatment. LYNCH, M.A.
2. Malignant Tumour's of the Mouth, Jaws and Salivary Glands LANGDONJ.1.D & HENK, J.M.
3. Cancer of the face and mouth Pathology and Management of Surgeons, MCGREGOR, I.A.& MCGREGOR, F.M.
4. Oral Oncology, (Proceedings of the 3rd International congress on oral cancel." VARMA, A.K.

Plastic and Reconstructive Surgery

1. Grabb & Smith's Plastic Surgery – 5th Edition. Editors Sherrell J.Aston, Robert W. Beasley & Charles.H.M. Thorne in 1997 by Lippincott – Raven Publishers, New York.
2. Mc Carthy Plastic Surgery Vol. 1 to 8 Editor Joseph G.Mc Carthy, 1990, London. W.B.Saunders
3. Mastery of Plastic & Reconstructive Surgery Vol.1- 3 edited by Mimi Cohen & Robert M. Golwyn, 1944, I Edn. , London Little Brown &Co.
4. Fundamentals of Plastic Surgery by Malcolumi W.marks & Charles Marks ,1997, London. W.B.Saunders Co.

5. Grabb's Endopledla of Flab Vol. 1 to 3, 2nd Edition Edited by Berish Strauch, Luiso. Vasconez & Elizabeth J. Hall – Findlay in 1998 by Lippincott – Raven – Publisher in Philadelphia, New York.
6. Mc crow & Arnolds Atlas of Muscle & Muscular Cutaneous Flaps
Authors David G.Dibbell, G.Partick Maxwell. J.Brien Murphy
peterpairolero & Christophpapp in 1986 by John Mc Crow & P.G.Arnold.
Publish Hampten press Publishing Company Inc.Narfoll, Virginia.
7. Skin Flaps Edited by William, Brabh & M.Bert Myers in 1975 by little, Brown & Company, Boston.

Molecular Biology

1. Molecular Diagnosis of Cancer , COTTER.F.E.
2. Molecular Biology for Oncologists ,YARNOLD. J.R. et al
3. Cancer Chemotherapy Handbook, BAQUIRANJ DELIA~
4. The Lymphomas, CANELLOS, G.P.et al
5. Chemotherapy source book, PERRY, M.C,
6. Leukemia, HENDERSON, E.S.et al
7. Cancer Medicine, HOLLAND, J .F. et al.
8. Clinical Oncology, ABELOFF et al
9. Important Advances *in* Oncology, EVITA, V.T.
10. Cancer Principles and Practice of Oncology, DEVITA , V. T. et al,
11. Decision Making *in* Oncology Evidence Based Management, DJULBEGOVIC. B & SULLIVAN.
12. AJCC Cancer' Staging Manual (American Joint Committee on Cancer
13. Cancer Treatment, HALNAN E .K
14. Cancer' Treatment, HASKEL
15. Oncology for' Palliative Medicine, HOSKIN PETER & MAKING WENDY)
16. Regional Therapy of Advanced Cancer, RUBIN, J.T
17. MAGRATH, I. The Non-Hodgkin's Lymphoma,
18. Comprehensive Text book of Oncology, Vol 1-2,.MOSSA, A.R
19. Oxford textbook of Oncology PECKHAM, M. et al I
20. A Multi-disciplinary Approach for Physicians and Students, RUBIN Clinical Oncology.

21. Atlas of Diagnostic oncology, SKARIN, A.T
22. *Basic Science of Oncology*, TANNOCK, E.I
23. Pediatric oncology, Philip LANSZOWSKY
24. Comprehensive text book of Thoracic Oncology, AISNER J. et al
25. Pediatric Surgical Oncology, ANDRASSY, R.J.
26. Glenn's Thoracic and Cardiovascular Surgery, Baue, A.E et al
27. Surgery of Childhood Tumors, CARACHI. R. et. al
28. Atlas of Surgical oncology, DALY, J.M. & CADY, B
29. Minimal Access Surgery in Oncology, GERAGHTY, J.G.et. al
30. Soft tissue tumors, HARMS D & SCHODT.D
31. Cancer Surgery, HARVEY, J.C. & BEATTIE, E.J
32. Bone tumors: Diagnosis, treatment and Prognosis, HUVOS, ANDREW G
33. Reconstructive Plastic Surgery for Cancer-, KROLL, S. S.
34. Bailey & Love's Short practice of Surgery, Manrl, C,V f\ Russel R. C.G
35. Surgical Emergencies, MONSON, J. et al
36. Atlas of Esophageal Surgery, SKINNER.D.B.

Anesthesiology

1. Pharmacology and Physiology in Anesthetic Practice, STOELTING, R.K.
2. Anaesthesiology: Problem-oriented Patient. Management, YAO, F. S .F

Journals

1. Acta Oncologica
2. British Journal of Cancer
3. Cancer
4. Cancer Journal for Clinicians
5. Cancer Detection & Prevention
6. Cancer Genetics and Cytogenetics
7. Cancer Journal (Scientific American) (NP)
8. Cancer Survey (NP)
9. Cancer Treatment Review
10. Clinical Oncology
11. Current Problem in Cancer
12. Current Opinion in Oncology
13. European Journal of Cancer
14. European Journal of Surgical Oncology
15. Genes, Chromosomes and Cancer
16. Indian Journal of Cancer (Indian)
17. International Journal of Cancer (UICC)
18. International Journal of Radiation Oncology
19. Biology/Physics
20. Journal of Cancer Education (NP)
21. Journal of Clinical Oncology
22. Journal of National Cancer Institute (Gift)
23. Journal of Psycho social Oncology
24. Journal of Surgical Oncology
25. Medical & Pediatric Oncology
26. Nutrition and Cancer
27. Oncology (NP)
28. Psycho-Oncology
29. Radiotherapy & Oncology
30. Seminars in Oncology
31. Seminars in Oncology Nursing
32. Seminars in Radiation Oncology
33. Seminars in Surgical Oncology
34. Surgical Oncology Clinics of North America

Chapter IV

Monitoring Learning Progress

It is essential to monitor the learning progress of each candidate through continuous appraisal and regular assessment. It not only also helps teachers to evaluate students, but also students to evaluate themselves. The monitoring be done by the staff of the department based on participation of students in various teaching / learning activities. It may be structured and assessment be done using checklists that assess various aspects. Checklists are given in Chapter IV.

The learning out comes to be assessed should included: (i) Personal Attitudes, (ii) Acquisition of Knowledge, (iii) Clinical and operative skills, and (iv) Teaching skills.

i) **Personal Attitudes.** The essential items are:

- Caring attitudes
- Initiative
- Organisational ability
- Potential to cope with stressful situations and undertake responsibility
- Trust worthiness and reliability
- To understand and communicate intelligibly with patients and others
- To behave in a manner which establishes professional relationships with patients and colleagues
- Ability to work in team
- A critical enquiring approach to the acquisition of knowledge

The methods used mainly consist of observation. It is appreciated that these items require a degree of subjective assessment by the guide, supervisors and peers.

ii) **Acquisition of Knowledge:** The methods used comprise of 'Log Book' which records participation in various teaching / learning activities by the students. The number of activities attended and the number in which presentations are made are to be recorded. The log book should periodically be validated by the supervisors. Some of the activities are listed. The list is not complete. Institutions may include additional activities, if so, desired.

Journal Review Meeting (Journal Club): The ability to do literature search, in depth study, presentation skills, and use of audio- visual aids are to be assessed. The assessment is made by faculty members and peers attending the meeting using a checklist (see Model Checklist – I, Chapter IV)

Seminars / Symposia: The topics should be assigned to the student well in advance to facilitate in depth study. The ability to do literature search, in depth study, presentation skills and use of audio-visual aids are to be assessed using a checklist (see Model Checklist-II, Chapter IV)

Clinico-pathological conferences: This should be a multidisciplinary case study of an interesting case to train the candidate to solve diagnostic and therapeutic problems by using an analytical approach. The presenter(s) are to be assessed using a check list similar to that used for seminar.

Medical Audit: Periodic morbidity and mortality meeting be held. Attendance and participation in these must be insisted upon. This may not be included in assessment.

iii) **Clinical skills**

Day to Day work: Skills in outpatient and ward work should be assessed periodically. The assessment should include the candidates' sincerity and punctuality, analytical ability and communication skills (see Model Checklist III, Chapter IV).

Clinical meetings: Candidates should periodically present cases to his peers and faculty members. This should be assessed using a check list (see Model checklist IV, Chapter IV).

Clinical and Procedural skills: The candidate should be given graded responsibility to enable learning by apprenticeship. The performance is assessed by the guide by direct observation. All Particulars are recorded by the student in the log book. (Table No.3, Chapter IV)

iv) Teaching skills: Candidates should be encouraged to teach undergraduate medical students and paramedical students, if any. This performance should be based on assessment by the faculty members of the department and from feedback from the undergraduate students (See Model checklist V, Chapter IV)

vi) Periodic tests: The departments may conduct three tests, two of them be annual tests, one at the end of first year and the other in the second year. The third test may be held three months before the final examination. The tests may include written papers, practicals / clinicals and viva voce.

vii) Work diary / Log Book- Every candidate shall maintain a work diary and record his/her participation in the training programmes conducted by the department such as journal reviews, seminars, etc. Special mention may be made of the presentations by the candidate as well as details of clinical or laboratory procedures, if any conducted by the candidate.

viii) Records: Records, log books and marks obtained in tests will be maintained by the Head of the Department and will be made available to the University or MCI.

Log book

The log book is a record of the important activities of the candidates during his training, Internal assessment should be based on the evaluation of the log book. Collectively, log books are a tool for the evaluation of the training programme of the institution by external agencies. The record includes academic activities as well as the presentations and procedures carried out by the candidate.

Format for the logbook for the different activities is given in Tables 1,2 and 3 of Chapter IV. Copies may be made and used by the institutions.

Procedure for defaulters: Every department should have a committee to review such situations. The defaulting candidate is counseled by the guide and head of the department. In extreme cases of default, the departmental committee may recommend that defaulting candidate be withheld from appearing the examination, if she/he fails to fulfill the requirements in spite of being given adequate chances to set himself or herself right.

CHAPTER IV (Contd.)

Format of Model Check Lists

Check List -1. MODEL CHECK-LIST FOR EVALUATION OF JOURNAL REVIEW PRESENTATIONS

Name of the Student:

Name of the Faculty/Observer:

Date:

Sl. No.	Items for observation during presentation	Poor 0	Below Average 1	Average 2	Good 3	Very Good 4
1.	Article chosen was					
2.	Extent of understanding of scope & objectives of the paper by the candidate					
3.	Whether cross references have been consulted					
4.	Whether other relevant publications consulted					
5.	Ability to respond to questions on the paper / subject					
6.	Audio-Visual aids used					
7.	Ability to defend the paper					
8.	Clarity of presentation					
9.	Any other observation					
10.	Total Score					

Check List - 2. MODEL CHECK-LIST FOR EVALUATION OF SEMINAR PRESENTATIONS

Name of the Student:

Name of the Faculty/Observer:

Date:

Sl. No.	Items for observation during presentation	Poor 0	Below Average 1	Average 2	Good 3	Very Good 4
1.	Whether other relevant publications consulted					
2.	Whether cross references have been consulted					
3.	Completeness of Preparation					
4.	Clarity of Presentation					
5.	Understanding of subject					
6.	Ability to answer questions					
7.	Time scheduling					
8.	Appropriate use of Audio-Visual aids					
9.	Overall Performance					
10.	Any other observation					
	Total Score					

Check List - 3

MODEL CHECK LIST FOR EVALUATION OF CLINICAL WORK IN WARD / OPD

(To be completed once a month by respective Unit Heads including posting in other departments)

Name of the Student:

Name of the Unit Head:

Date:

Sl. No.	Points to be considered:	Poor 0	Below Average 1	Average 2	Good 3	Very Good 4
1.	Regularity of attendance					
2.	Punctuality					
3.	Interaction with colleagues and supportive staff					
4.	Maintenance of case records					
5.	Presentation of cases during rounds					
6.	Investigations work up					
7.	Beside manners					
8.	Rapport with patients					
9.	Counseling patient's relatives for blood donation or PM					
10.	Over all quality of Ward work					
	Total Score					

Check List – 4 EVALUATION FORM FOR CLINICAL PRESENTATION

Name of the Student:

Name of the Faculty:

Date:

Sl. No.	Points to be considered	Poor 0	Below Average 1	Average 2	Above Average 3	Very Good 4
1.	Completeness of history					
2.	Whether all relevant points elicited					
3.	Clarity of Presentation					
4.	Logical order					
5.	Mentioned all positive and negative points of importance					
6.	Accuracy of general physical examination					
7.	Whether all physical signs elicited correctly					
8.	Whether any major signs missed or misinterpreted					
9.	Diagnosis: Whether it follows logically from history and findings					
10	Investigations required ▪ Complete list					
	▪ Relevant order					
	▪ Interpretation of investigations					
1.	Ability to react to questioning Whether it follows logically from history and findings					
2.	Ability to defend diagnosis					
3.	Ability to justify differential diagnosis					
4.	Others					
Grand Total						

Check List - 5

MODEL CHECK LIST FOR EVALUATION OF TEACHING SKILL PRACTICE

Sl. No.		Strong Point	Weak Point
1.	Communication of the purpose of the talk		
2.	Evokes audience interest in the subject		
3.	The introduction		
4.	The sequence of ideas		
5.	The use of practical examples and/or illustrations		
6.	Speaking style (enjoyable, monotonous, etc., specify)		
7.	Attempts audience participation		
8.	Summary of the main points at the end		
9.	Asks questions		
10.	Answers questions asked by the audience		
11.	Rapport of speaker with his audience		
12.	Effectiveness of the talk		
13.	Uses AV aids appropriately		

LOG BOOK

Table 1 : Academic activities attended

Name:

Admission Year:

College:

Date	Type of Activity Specify Seminar, Journal Club, Presentation, teaching UG	Particulars

LOG BOOK

Table 2 : Academic presentations made by the student

Name:

Admission Year:

College:

Date	Topic	Type of Presentation Specify Seminar, Journal Club, Presentation, UG teaching etc.

LOG BOOK

Table 3 : Diagnostic and Operative procedures performed

Name:

Admission Year:

College:

Date	Name	ID No.	Procedure	Category O, A, PA, PI*

- * **Key:**
- O - Washed up and observed
 - A - Assisted a more senior Surgeon
 - PA - Performed procedure under the direct supervision of a senior surgeon
 - PI - performed independently

Model Overall Assessment Sheet

Name of the College:

Academic Year:

Check List No	Particulars	Name of Student and Mean Score				
		A	B	C		
I	Journal Review Presentations					
II	Seminars					
III	Clinical work in wards					
IV	Clinical presentation					
V	Teaching skill practice					
Total Score						

Note: Use separate sheet for each year.

Chapter V

Medical Ethics Sensitization and Practice

Introduction

There is now a shift from the traditional individual patient, doctor relationship, and medical care. With the advances in science and technology and the needs of patient, their families and the community, there is an increased concern with the health of society. There is a shift to greater accountability to the society. Doctors and health professionals are confronted with many ethical problems. It is, therefore necessary to be prepared to deal with these problems. To accomplish the Goal (i), General Objective (ii) stated in Chapter II (pages 2.1 to 2.3), and develop human values it is urged that *ethical sensitization* be achieved by lectures or discussion on ethical issues, clinical case discussion of cases with an important ethical component and by including ethical aspects in discussion in all case presentation, bedside rounds and academic postgraduate programmes.

Course Contents

1. *Introduction to Medical Ethics*
 - What is Ethics
 - What are values and norms
 - Relationship between being ethical and human fulfillment
 - How to form a value system in one's personal and professional life
 - Heteronomous Ethics and Autonomous Ethics
 - Freedom and personal Responsibility
2. *Definition of Medical Ethics*
 - Difference between medical ethics and bio-ethics
 - Major Principles of Medical Ethics
 - Beneficence = fraternity
 - Justice = equality
 - Self determination (autonomy) = liberty
3. *Perspective of Medical Ethics*
 - The Hippocratic oath
 - The Declaration of Helsinki
 - The WHO Declaration of Geneva
 - International code of Medical Ethics (1993)
 - Medical Council of India Code of Ethics
4. *Ethics of the Individual*
 - The patient as a person
 - The Right to be respected
 - Truth and Confidentiality
 - The autonomy of decision
 - The concept of disease, health and healing
 - The Right to health
 - Ethics of Behaviour modification
 - The Physician – Patient relationship
 - Organ donation

5. *The Ethics of Human life*
 What is human life
 Criteria for distinguishing the human and the non-human
 Reasons for respecting human life
 The beginning of human life
 Conception, contraception
 Abortion
 Prenatal sex-determination
 In vitro fertilization (IVF), Artificial Insemination by Husband (AIH)
 Artificial Insemination by Donor (AID),
 Surrogate motherhood, Semen Intrafallopian Transfer (SIFT),
 Gamete Intrafallopian Transfer (GIFT), Zygote Intrafallopian Transfer (ZIFT),
 Genetic Engineering

6. *The Family and Society in Medical Ethics*
 The Ethics of human sexuality
 Family Planning perspectives
 Prolongation of life
 Advanced life directives – The Living Will
 Euthanasia
 Cancer and Terminal Care

7. *Profession Ethics*
 Code of conduct
 Contract and confidentiality
 Charging of fees, Fee-splitting
 Prescription of drugs
 Over-investigating the patient
 Low – Cost drugs, vitamins and tonics
 Allocation of resources in health cares
 Malpractice and Negligence

8. *Research Ethics*
 Animal and experimental research / humanness
 Human experimentation
 Human volunteer research – Informed Consent
 Drug trials

9. *Ethical workshop of cases*
 Gathering all scientific factors
 Gathering all human factors
 Gathering all value factors
 Identifying areas of value – conflict, Setting of priorities,
 Working our criteria towards decisions

Recommended Reading

Francis C.M., **Medical Ethics**, 1 Ed, 1993, Jaypee Brothers, New Delhi.