

**The Tamil Nadu Dr.M.G.R.Medical University, Chennai.**

**REGULATIONS AND CURRICULAM FOR POST GRADUATE  
COURSE IN NATUROPATHY AND YOGA**

**1.M.D. Naturopathy**

**2.M.D. Yoga**

**3.M.D. Acupuncture & Energy Medicine**

## **Goals and General Objective of Postgraduate Medical Education Program**

### **1.Goal**

- The goal of postgraduate medical education shall be to produce competent specialist/Medical teacher.
- Who shall recognize the health needs of the community, and carry out professional obligations ethically and in keeping with the objectives of the national health policy.
- Who shall have mastered most of the competencies, retraining to the speciality, which is required to be practical at the secondary and the tertiary levels of the health care delivery system.
- Who shall be aware of the contemporary advances and developments in the discipline concerned.
- Who shall have acquired a spirit of scientific inquiry and is oriented to the principles of research methodology and epidemiology.
- Who shall have acquired the basic skills in teaching of the medical and paramedical professionals.

### **1.General Objectives**

- At the end of the postgraduate training in the discipline concerned the student shall be able to:
  - Recognize the importance of the concerned specialty in the context of the health need of the community and the national priorities in the health sector.
  - Practice the speciality concerned ethically and in step with the principles of primary health care.
    - i.Demonstrate sufficient understanding of the basic sciences relevant to the concerned specialty particularly to understand the physiological effects and clinical application of Yoga& Naturopathy.
    - ii.Identify Social, Economic, Environmental, Biological and Emotional determinants of health in a given cases and take them into account while planning therapeutic, rehabilitative, preventive and promotive measures/strategies.
    - iii.Diagnose and manage majority of the conditions in the speciality concerned on the basis of clinical assessment, and appropriately selected and conducted traditional and conventional investigations.

- iv. Plan and advise measures for the prevention rehabilitation of patients suffering from disease and disability related to the specialty.
- v. Demonstrate skills in documentation of individual case details as well as morbidity data relevant to the assigned situation.
- vi. Demonstrate empathy and humane approach towards patients and their families and exhibit interpersonal behaviors in accordance with the societal norms and expectations.
- vii. Play the assigned role in the implementation of national health programs, effectively and responsibly.
- viii. Organize and supervise the chosen/assigned health care services demonstrating adequate managerial skills in the clinical/hospital or community field situation.
- ix. Develop skills as a self-directed learner; recognize medical continuing educational needs; select and use appropriate learning resources.
- x. Demonstrate competence in basic concepts of research methodology and epidemiology, and be able to critically analyze relevant published research literature.
- xi. Develop skills in using educational methods and techniques as applicable to the teaching of medical/nursing students, general physicians and paramedical health workers.
- xii. Function as an effective leader of a health team engaged in health care, research training.

### **1. Objectives**

The following objectives are laid out to achieve the goals of the course.

These objectives are to be achieved by the time the candidate completes the course. The objectives may be considered under the sub-headings:

- Knowledge (cognitive domain)
- Skills (psychomotor domain)
- Human values, ethical practice and communication abilities.

### **1. Statement of Competencies:-**

Keeping in view the general objectives of postgraduate training, each discipline shall aim at development of specific competences, which shall be defined and spell out in clear terms. Each department shall produce a statement and bring it to the notice of the trainees in the beginning of the

program so that he or she can direct the efforts towards the attainment of these components.

## **2. Components of Post Graduate Curriculum**

The major components of the PG curriculum shall be:

- Theoretical Knowledge
- Practical/clinical skills.
- Training in Thesis/Dissertation.
- Attitudes, including communication.
- Training and advances in research methodology.

### **1. Eligibility for Admission:**

The following persons will be eligible for admission in the above course:

Regular Medical Degree Course in Bachelor of Naturopathy and Yogic Sciences (BNYS) from recognized university/ four and half years regular Diploma in Naturopathy (N.D) of Osmania University, Hyderabad.

B.N.Y.S ----

- a) Bachelor of Naturopathy and Yogic Sciences 5 ½ years regular course 4 ½ + 1 year internship awarded by NTRUHS (AP state) , RGUHS (Karnataka ) and other recognized universities
- b) B.N.Y.S---- 5 years regular course (4years + 1 year internship) awarded by RGUHS (Karnataka) and Mangalore University(Karnataka).

The candidates from other university need to obtain eligibility certificate before admission from this university by submitting the following certificates

1. Degree certificate / provisional certificate-II
2. Completion of internship certificate
3. Migration certificate
4. Higher secondary certificate –(10+2)

### **7. DURATION OF THE COURSE;**

The duration of the course will be three years

### **8. REGISTRATION;**

A candidate for the M.D. Naturopathy/Yoga/Acupuncture& Energy Medicine degree shall register himself/herself with the university prior to the commencement of the course on the 1st October of that year by paying the prescribed fee.

**9. ATTENDANCE:**

The student will be required to attend at least 85% of total lectures and practical in each subject before he/ she will be allowed to appear for the examinations. The syndicate may however consider special case on merit. A candidate pursuing the course should work in the institution as a full time student by attending clinical duty, teaching practice etc as instructed by the principal. No candidate should be permitted to run a clinic/laboratory/nursing home while studying P.G. No candidate shall join any other course of study or appear for any other examination conducted by this University or any other University in India or abroad during the period of study.

**10., EXAMINATION:**

1. Once the title of dissertation is accepted the student will not be allowed to change the proposed scheme of work without prior sanction of the authorities concerned.
2. Working for a dissertation should be utilized for intensive study of relevant literatures, collecting notes, scientific data, experiments seminars, workshops and its critical study. The dissertation must consist of students own account of research. They should be able to re –express his/her observation and draw conclusions on the basis of the study of literature in the field.
3. The dissertation should be suitable for its publication in abridged form.
4. In no case, a paper written or published in joint name of two or more authors shall be accepted as dissertation. The student may however submit in support of his/her dissertation a published work at which he/she is the author or co-author.
5. The dissertation should contain at the end a summary of not more than 1500 words embodying the conclusion arrived at by the students.
6. The dissertation must be typed on one side of the paper with a margin of one inch on either side and must be bound. On the outer cover, the title of the dissertation, the name of the student, the name of the article, the name of the guide and year of circulation of the dissertation should be mentioned. The dissertation should not ordinarily exceed 150 one side typed pages and should not be less than 50 one side pages including charts/bar diagrams photographs, bibliography/References etc..
7. The dissertation should be submitted in the third year of the examination. The last date for submission of dissertation is 3 months before final examination.
8. Four copies in English, the bound dissertation together with a certificate from the head of the department must be submitted to the university, through the principal of college or on or before the date prescribed for the submission.

9. The dissertation should be examined by examiners appointed by the university.
10. The dissertation when accepted shall become the property of the university and permission to publish the same shall be obtained from the university. In no case it should be published before it is accepted.
11. One of the dissertations will be kept in university library, one in the college library, one in the concerned (and one copy for the guide).
12. If the dissertation is not approved it will be returned to the student with the remarks of the examiners and the student can resubmit the same after complying with the observation made by the examiners within 3 months before next examination.
13. There will be viva-voce test practical examination on the subject of the dissertation comprising marks in aggregate.(100 marks)
14. The dissertation should represent in outcome of methodology and scientific research pursued by the student on the problems selected by him/her, and completed under guidance of the Head of Department/Institution.
15. Before the student is allowed to undertake work in dissertation, the title of dissertation should be registered with university within one month from declaration of the result of the preliminary year.

#### **11. THE APPLICATION FOR THE REGISTRATION OF DISSERTATION:**

1. Full title of the dissertation and methodology indicating familiarity with the subject of the student.
2. The name of the department shall be specifically mentioned. The report of the examiners of the dissertation will be taken into consideration in the final assessment of the results of the candidate at the examination.
3. The candidate need not appear in the subsequent chances in the subject or subjects if he has already posted and declared successful.
4. If a candidate fail in one subject only, in the I year he shall be promoted to the next higher class but he shall have to pass in the subject before he is allowed to appear in the final examination.

#### **12. PATTERN OF STAFF for each speciality**

1. Professor --- One
2. Associate professor/Reader --- One
3. Assistant professor/Lecturers--- Two
4. Demonstrator/tutor/Asst.Lecturer--One
5. Assistant -- One
6. Multipurpose worker-- One

### **13. Medium of instruction**

Medium of instruction shall be English

### **14. Scheme of examination**

**M.D.** degree examinations shall consist of dissertation, written paper (theory), practical/clinical and viva voce.

**Dissertation:** Every candidate shall carry out work and submit a dissertation as indicated as above.

#### **WRITTEN EXAMINATION:**

#### **M.D. (YOGA)**

##### **First Year**

Paper I- Applied Basic Medical Sciences and Concepts of Health & Diseases in yoga

##### **Second Year**

Paper II- Diagnosis Using Conventional Medicine & Indicators of Disease Process in yoga and the therapeutic yoga in management of disorders

Paper III- Diagnosis Using Conventional Medicine & Indicators of Disease Process in yoga and the therapeutic yoga in management of disorders

##### **Third Year**

Paper IV- Research methodology and recent advances in yoga

Final dissertation presentation with viva voce

#### **M.D. (NATUROPATHY)**

##### **First Year**

Paper I - Applied basic medical sciences and concepts of health & diseases in Naturopathy

##### **Second Year**

Paper II - Diagnosis using conventional medicine & indicators of disease process in Naturopathy and therapeutic management of disorders through naturopathy.

Paper III - Diagnosis using conventional medicine & indicators of disease process in Naturopathy and therapeutic management of disorders through naturopathy.

##### **Third Year**

Paper IV- Research methodology and Recent advances in naturopathy  
 Final dissertation and presentation with viva voce  
**M.D. (ACUPUNCTURE & ENERGY MEDICINE)**

**First year**

Paper I- Applied basic medical sciences and concepts of health & diseases in Acupuncture

**Second year**

Paper II- Diagnosis using conventional medicine & indicators of disease process in Acupuncture and the therapeutic management of disorders through Acupuncture

Paper III- Diagnosis using conventional medicine & indicators of disease process in Acupuncture and the therapeutic management of disorders through Acupuncture

**Third year**

Paper IV- Research methodology and recent advances in Acupuncture

Final dissertation and presentation with viva voce

Written examination shall consist of 3 hours duration for each paper. Each paper shall carry 100 marks theory, 100 marks practical (IA-(20) & Practical (80) ) , and 50 marks for viva voce

**Pattern for the theory Question paper scheme:**

Duration: 3 hours

Max Marks: 100

Type of questions	No. of questions for each subject	No. of questions and marks for each question	Total Marks
Long essay	2	2x20	40
Short Notes	6	06x10	60

**Total- 100**

**Practical examination:**

**Clinical examination**

**Total marks: 80**

To elicit competence in clinical skills one long case 40 marks

Differential diagnostic formulation two short cases-20 x 2 40 marks

In case of practical examination For example,it should be aimed at assessing (i) competence in the practice of yoga and teaching methods, (ii) use of disease specific yoga modules based on clinical examinations, (iii) ability to make relevant and valid observations, interpretations, and inference of laboratory or experimental work relating to his/her subject. same model for naturopathy and acupuncture shall be followed.

In case of clinical examination, it should be aimed 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 total marks for practical/clinical examination shall be 80.

**Viva voce:** viva voce examination shall aim at assessing depth of knowledge, logical



reasoning, confidence and oral communication skills. The total marks shall be 50 and the distribution of marks shall be as under:

- For examination of all components of syllabus 30 marks
- For pedagogy 20 marks
- Viva-voce examination: (30 marks)*

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, histopathology slides, x-rays, ultrasound, CT scan images, etc., for interpretation. In addition, the candidates may also be evaluated on the skills in identifying and interpreting the indicators of disease according to specialty. It includes discussion on dissertation also

- Pedagogy Exercise: (20 marks)*

A topic is given to each candidate in the beginning of clinical examination. He/she asked to make a presentation on the topic for 8-10 minutes.

**Examiners:** There shall be at least two examiners, one internal and one external from outside the University. The qualification and teaching experience for appointment, as an examiner shall be as that of a post-graduate guide.

**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 candidates may appear in any subsequent examinations upon payment of fresh fee to the registrar.

**Declaration of Distinction:** A successful candidate passing the university examination in first attempt will be declared to have passed the examination with distinction if the grand total aggregate marks are 75% and above Distinction will not be awarded for candidates passing the examination in more than 1 attempt.

### **Monitoring Progress of Studies:**

a. Work diary/log book: Every candidate shall maintain a work diary and record his/her participation in the training programs conducted by the department such as practical training in yoga, disease specific yoga therapy modules, yoga therapy teaching sessions, journal reviews of papers relevant to yoga therapy, seminars on concepts of yoga and management of diseases using yoga therapy, etc (please see chapter IV for model check list and log book specimen copy).

b. The candidate may make special mention in the presentations on the observations made on clinical or laboratory procedures if conducted by the candidate. The work diary shall be scrutinized and certified by the head of the department and head of the institution and presented in the university practical/clinical examination.

### **INTERNAL ASSESSMENT (IA) – 20 MARKS**

Institution running the course shall conduct two internal assessment exam before appearing for the annual exam, the tests may include written papers, articles/clinical and viva voce. The marks obtained in these tests will be considered for internal assessment. Average of the two marks will be computed for internal

assessment

If a candidate is absent from the test due to genuine and satisfactory reason, such a candidate may be given a re-test within a fortnight.

### **Guide:**

The academic qualifications and teaching experience required for recognition by this university as a guide for dissertation work is as per the guidelines from the concerned board of studies. **In the present scenario**, in the field of Yoga & Naturopathy system of medicine, there are no pg. Courses i.e., M.D. for the graduates in Yoga & Naturopathy in Tamilnadu. In this situation, the faculty with the following guidelines shall be considered as faculty and guide for post-graduation Candidates possessing master's and doctoral degree in Yoga/Naturopathy from any recognized University along with the undergraduate degree in Naturopathy & Yogic Sciences having more than 7 years of teaching experience / 15 years clinical experience in hospitals of Yoga & Naturopathy will be designated as professors, 5 years teaching experience will be designated as associate professors/reader, 3 years teaching experience will be called as assistant professors/lecturer and no teaching experience is required for the demonstrator / Asst. lecturer. for the M.D. program. Existing teaching faculties with **BNYS/ ND [OSM. Uni.]** Having more than 10 years of teaching experience / 20 years clinical experience in hospitals of Yoga & Naturopathy will be designated as professors, 5 years experience will be designated as associate professors and less than 5 years of teaching experience as lectures.

A co guide may be included provided the work requires substantial contribution from a sister department or from another medical institution recognized for teaching/training by the Tamil Nadu Dr.M.G.R.Medical university, Chennai. The co guide shall be recognized postgraduate teacher of Tamil Nadu Dr.M.G.R.Medical University, Chennai. Change of guide, in the event of a registered guide leaving the college for any reason or in the event of death of guide, guide may be changed with prior permission from university.

### **Minimum required Infrastructural facilities:-**

The post graduate education Centre for conducting M.D (yoga) shall satisfy the entire minimum requirements of undergraduate training (BNYS) as prescribed by the University and in addition shall full fill additional requirements of post graduate training. Only BNYS Degree colleges functioning with reputation and at least five batches would have been passed out are eligible to start the PG course. Apart from UG (BNYS) requirements, the Post Graduate Department shall have well designated lecture hall(s) with audio-visual facilities, yoga hall, established laboratories for Basic medical sciences, diagnostic laboratories, laboratories for yoga and naturopathy research [basic and clinical] and a museum. Each department shall have separate staff room and departmental library. Separate Post Graduate Hostels for Male & Female. The stipend and contingency shall be provided at the rates prevailing in the state for other medical Post Graduate students.

### **Teaching hospital requirements:-**

The hospital with starting minimum of 50 beds is required to start a M.D. program. By the end of the third year of PG admission the hospital will have 100 beds. The student-bed ratio in the hospital should be 1:3. The number of candidates permitted shall depend upon available bed strength over and above minimum hundred bed strength prescribed. The Annual average bed occupancy in the hospital should be

more than 60%.

## **COURSE CONTENTS - M.D. NATUROPATHY**

### **PAPER I**

#### **APPLIED BASIC MEDICAL SCIENCES AND CONCEPTS OF HEALTH & DISEASES IN NATUROPATHY**

##### **Philosophy & Practice of Naturopathy:**

Basic principles of naturopathy, Concepts of Health & Disease according to Naturopathy and Modern Science, History & Evolution of Therapies used in naturopathy, Traditional and Indian Naturopathy as enunciated in ancient Indian scriptures and culture, Innate Healing and Health realization, Concept of Drugless therapies and their relevance in naturopathy health care system; principles of health promotion and disease prevention; the curative aspects of disease and quality of life in naturopathy, Naturopathic approach in the prevention and management of stress related/lifestyle related disorders, Relationship between Naturopathy and Spirituality, Influence of Demographic, Socio-economic, Culture, Environmental & Occupational factors on health according to Naturopathy, Naturopathic approaches to women's Health & child health, Integration of Natural living based on Naturopathy in public health and its' cost effectiveness in sustainable health care system.

##### **Applied Basic Medical Science Relevant to Naturopathy**

Applied anatomy, applied physiology and biochemistry related to advancement in understanding the physiological effects of natural therapies and establishing the physiological basis for symptomatology and diagnosis and chromo diagnosis. Microbiology and pathology relevant to the concepts of health and disease in naturopathy.

Clinical pharmacology - Introduction to principles of drug therapy, adverse drugs reaction, physiology and pharmacology of the autonomic nervous system, Nitric oxide and its' biologic and medical implications.

\*This provides the required knowledge to handle patients who are on conventional medications while offering naturopathic treatments

##### **Physiological Basis & Clinical Relevance Of Natural Therapies:**

###### **1)Physiological effects of therapies used in naturopathy viz.**

- Fasting,Nutrition and Dietetics
- Hydrotherapy and Clay Therapy
- Manipulative therapies [Massage therapy; chiropractice; osteopathy & physical therapy]
- Acupuncture and Acupressure
- Color therapy & Magneto therapy
- Energy medicine
- Health/clinical psychology and Therapeutic counseling

###### **1)Clinical relevance of therapies used in naturopathy:**

clinical applications and underlying mechanisms for the individual and combinations of treatment used in naturopathy. The disease specific naturopathic treatments strategies are evolved based on (i) historical use of natural therapies (ii) available physiological effects of individual therapies and (iii)clinical observations

##### **Reference Books:**

###### **Anatomy/physiology/biochemistry/biostatics**

- 1.Samson Wright's applied physiology, oxford university press (India),1998
- 2.Clinical anatomy; A revision and applied anatomy for clinical students Harold Ellis,

Blackwell publishing,2006

3.Applied Biochemistry of Clinical Disorders (hardcover), Allan G.Gornall Lippincott Williams & Wilkins,1981.

4.Essentials of pathophysiology: Concepts of Altered Health States Carol M attSOfl Porth. Lippincott Williams & Wilkins, 2006.

5.Basic Pharmacology (paperback), perspective press (Editor),Morton Publishing Company;2000

6.Clinical Neuroanatomy for medical students.4th edition.

7.Textbook of medical physiology, guyton.9th edition.

8.Review of medical physiology,guyton.18th edition.

9.Harper's biochemistry,25th edition.

10.Lippincott's illustrated review – biochemistry,2nd edition

11.Methods in biostatistics,B.K.Mahajan,6th edition.

### **Pharmacology/Microbiology/Pathology**

1.Textbook of pharmacology, Goodman and Gill Mann's.

2.Washington manual of medical therapeutics, 29th edition.

### **Naturopathy**

1.Principles of naturopathy combining Old and New: Naturopathy for 21s century by Robert S.Thiel Whitman publication,2001

2.Vitality, Fasting and Nutrition: A Physiological study of the Curative power of Fasting, Together with a New Theory of the Relation of food to Human Vitality (Paperback) Hereward Carriquton.Kessinger publishing,1996

3.Therapeutic Massage: A scientific Approach.Turchaninov R. Aesculapiu Books, 2000.

4.The Massage Connection: Anatomy and Physiology (Lww Massage Therapy & Bodywork Series) (Hardcover), Kalyani PremKumar.

5.Lippincott Williams & Wilkins; 2 Signed edition (August 1, 2003)

6.Energy Medicine: The Scientific basis. James I. Oschman. Churchill Livingstone, 2000

7.Acupuncture. A scientific appraisal. Adrian White and Edzard Ernst, Butterworth-Heinemann,1999

8.Hydrotherapy Theory & Technique [TEACHER'S EDITION] Pine Island Publisher's Inc.; 3rd edition (2003)

9.Rational Hydrotherapy J H Kellog Indian Edition pub by NTN, Pune (2005)

10.B Massage Therapy J H Kellog pub (19)

11.Fasting can save your life Indian Ed Herbert M Shelton pub Prakrti Jivana Kendra, Bangalore

12.Toxemia Explained J H Tildon, pub

13.Hydrotherapy & Heliotherapy Natural Healing With Water. Herbs & Sunlight) Maureen O'Rourke Educating Hands Inc. 1995

14.Hydrotherapy Principles and Practice by Margaret Reid Campion Paperback (Jan 15, 1997)

15.Technique of hydrotherapy and Swedish massage by George Knapp Abbott (Unknown Binding – 1948)

16.Modern Hydrotherapy for the Massage Therapist by Mary Betts Sinclair (Hardcover – Nov 1,2007)

17.Hydrotherapy in Practice by Bridget C. Davis and Ronald A Harrison (Paperback – Jan 1988)

18.Fundamentals of Chinese Acupuncture (Paradigm Title) by Andrew Ellis. Nigel Wiseman, and Ken Boss (Paperback –Feb 1991)

19.Acupuncture As Healing Arts by homer cheng (Paperback – 1976)

20. Fasting for health, a complete guide on how. When, and why to use the fasting cure (A Classic of health and nutrition) by Bernarr Mac Fadden (Unknown Binding – 1978)
  21. Nutrition Solution: A Guide to your Metabolic Type by Harold J. Kristal, James M. Haig, and John R. Lee (Paperback – Dec 9, 2002)
  22. Public Health Nutrition (Nutrition Society Textbook) by John M. Kearney, Barrie M. Margetts, Annie Anderson, and David Barker (Paperback – Nov 1, 2004)-Illustrated
  23. Scientific Fasting: The Ancient and Modern Key to Health by Linda Burfield Hazzard (Paperback – Mar 1997)
  24. Nutrition and Metabolism (Human Nutrition Textbook Series) by Ian Macdonald, Helen M. Roche, Nutrition Society Staff, and Michael J. Gibney (Paperback – Oct 1, 2003)-Illustrated
  25. Healing with Whole Foods: Asian Traditions and Moderns and Modern Nutrition by Paul Pitchford (hardcover – Feb 28, 2003)
  26. Introduction to Human Nutrition (Human Nutrition Textbook Series, I) by Fran's J. Kok, Hester H. Vorster, Paul Deurenberg, and Wayne Anderson (Paperback – Oct 1, 2002)-Illustrated
  27. Principles of Human Nutrition: A Study in Practical Dietetics by Whitman H. Jordan (Paperback-Dec 30, 2004)
  28. Nutritional Biochemistry, Second Edition by Tom Brody (Hardcover – Jan 15, 1999)
  29. Massage Therapy: Principles and Practice by Susan G. Salvo (Paperback-May 3, 2007)
  30. Philosophy and Mechanical Principles of Osteopathy By Andrew Taylor (Hardcover – Jun 1986)
  31. Science in the Art of Osteopathy: Osteopathic Principles and Practices Caroline Stone (Paperback – Jul 2000)
  32. The Complete Book of Energy Medicine: Choosing Your Path to Health by Helen E. Dziemidko and Helen, M. D. Dziemidko (Paperback – Oct, 1999)
  33. Naturopathy and Yoga by Parvesh Handa (Hardcover – Oct 30, 2006)
  34. Energy Medicine by Donna Eden, David Feinstein, and Caroline My (Paperback – Dec 27, 1999)
  35. Color Psychology and Color Therapy: A Factual Study of the Influence of Color on Human Life (Paperback) Faber Birren, Kessinger Publishing, 2006
  36. Magnet Therapy (Hardcover) Joseph Kandel, David Sudderth, Prima Publishing 1998
  37. Clinical electrotherapy your guide to optimal treatment. Jan M. Bjordal, Ph. PT, Mark I. Johnson, ML Physiol., Ph.D, Christian Coupe, PT, Prima Bool 2007
  38. Aromatherapy For Holistic Therapists Francesca Gould, Nelson Thornes, 2003
  39. Foundations For osteopathic Medicine (Hardcover) Robert C Ward, Raymond Hruby, John A Jerome, John M Jones, Robert E Lippincott Williams & Wilkins 2002
  40. Scientific explanations and Consciousness, BV Sreekantam: (NIAS Bangalore)
  41. Pharmacology in Exercise and Sports (Handbooks in Pharmacology and Toxicology) by Satu M. Somani (Hardcover – Dec 18, 1995)
- \*The list of reference books shall be updated every year and submitted to the university for Approval by the institution executing the MD program.**

## **PAPER II**

### **DIAGNOSIS USING CONVENTIONAL MEDICINE & NATUROPATHY AND THE NATUROPATHIC TREATMENT FOR THE DISORDERS**

#### **Disorders of the cardiovascular system**

- Alteration in circulatory and Respiratory functions:-Dyspnea, cough, approach to the patient with a history of stable or unstable angina, approach to the patient with

hypertension; cyanosis; edema; shock.

- Diagnosis and approach to the patient with heart disease-physical examination the cardiovascular system. Knowledge about conventional treatments.
- Disorders of the heart; normal and abnormal myocardial functions, heart failure congenital heart disease in the adult, Rheumatic fever, Valvular heart disease, Cardiac pulmonale; Cardiomyopathies; Myocarditis; Pericardial disease, Cardiac manifestations of systemic diseases.
- Vascular disease; atherosclerosis; acute myocardial infarction; ischemic heart disease; hypertensive vascular disease; vascular disease of the extremities.
- Cardiac rehabilitation

### **Disorders of the respiratory system**

- Diagnosis and approach to the patient with disease of the respiratory system. Knowledge about conventional treatments.
- Disorders of the respiratory system; Bronchial Asthma; Chronic bronchitis.
- COPD; emphysema and airway obstruction; disorders of ventilation; sleep apnea; acute respiratory distress syndrome
- Pulmonary rehabilitation

### **Disorders of the kidney and urinary tract**

- Alterations in Urinary functions and Electrolytes*; cardinal manifestations of the renal disease; voiding dysfunction, incontinence and bladder pain; fluid and electrolyte disturbances; acidosis and alkalosis.
- Alterations In The Urogenital Tract*: impotence; disturbances of menstruation and other common gynecologic complaints in women.
- Approach to the patient with diseases of the kidney and urinary tract. Knowledge about conventional treatment. Disturbance of renal function, acute renal failure and chronic renal failure.

### **Disorders of the gastrointestinal system**

- Alterations in Gastrointestinal Functions*: dysphagia, nausea, vomiting and indigestion; diarrhea and constipation; gastrointestinal bleeding; jaundice-abdominal swelling; ascitis.
- Approach to the patient with gastrointestinal disease. Knowledge about conventional treatments
- Diseases of the Oesophagus; peptic ulcer and related disorders, disorders of absorption, IBS, ulcerative colitis and crohns disease
- Liver and Biliary tract disease; Approach to the patient with liver disease; evaluation of liver function; derangements of hepatic metabolism; Bilurubin metabolism and hyperbilirubinemia; toxin and drug induced hepatitis; chronic hepatitis; cirrhosis and alcoholic liver disease; infiltrative and metabolic disease affecting the liver.
- Disease of the gallbladder and the bile ducts.
- Disorders of the pancreas – Acute and Chronic pancreatitis

### **Disorders of the Immune System, Connective Tissues and Joints**

- Hematological alteration – anemia; bleeding and thrombosis; enlargement , of lymph nodes and spleen
- Pathophysiology and management of Pain -chest discomfort and palpitation – abdominal pain – headache– back and neck pain
- Approach to the patient with the disorder of immune system, connective tissue and joints.

- Disorders of the immune system – Introduction to immune system, major histocompatibility, primary immune deficiency disease; HIV disease; AIDS and related disorders; Amyloidosis
- Disorder of immune mediated injury – Disease of immediate type hypersensitivity; systemic lupus erythematosus; Rheumatoid arthritis; Dermatomyositis and polymyositis; Sjogren's syndrome, Ankylosing spondylitis; Behcet's syndrome; the Vasculitis syndromes; Sarcoidosis.
- Disorders of the joints – Approach to articular and musculoskeletal disorders; osteoarthritis; arthritis due to deposition of calcium crystals, infectious arthritis psoriatic arthritis and arthritis associated with gastrointestinal diseases; relapsing polychondritis and other arthritides.

### **Disorders of Endocrine and Metabolism**

- Alteration in body temperature: fever and hyperthermia; fever and rash hypothermia.
- Endocrinology – Approach to the patient with endocrine and metabolic disorder knowledge about conventional treatments.
- Obesity, anorexia nervosa and bulimia nervosa; enteral and parenteral nutritional therapy; vitamin deficiency and excess-disturbance in trace elements
- Neuroendocrine Regulation and diseases of the anterior pituitary; diseases of the thyroid; diseases of the adrenal cortex, pheochromocytoma; diabetes mellitus; hypoglycemia; disorders of the testis, ovary and female reproductive tract; endocrine disorders of the breast; disorders affecting multiple endocrine systems.
- Disorders of intermediary metabolism – disorders of the lipoprotein metabolism hemochromatosis; porphyrins; gout and other disorders of purine metabolism.
- Disorders of bone and mineral metabolism – calcium, phosphorous, bone metabolism; calcium regulating hormones; diseases of the parathyroid gland metabolic bone disease; disorders of phosphorous metabolism.

### **Reference book:**

#### **Cardiology**

- 1) The clinical recognition of congenital heart diseases- Joseph K Perloff, edition Jaypee
- 2) An introduction to electrocardiography—Leoschamroth, 7th edition black science
- 3) Practical Electrocardiography – Marriot, 9th edition Textbook of Cardiovascular Medicine – Eugene Braunwald, 5th edition.
- 4) The heart – hurst, 9th edition
- 5) Congenital heart disease in adults-Perloff, 2nd edition. Cardiovascular at pulmonary physical therapy: an evidence-based approach by William DeTurk and Lawrence P Cahalin.
- 6) Complementary and alternative cardiovascular medicine: clinical Handbook (contemporary cardiology set) (contemporary cardiology) by Richard A. Stephen and Mehmet C Oz (hardcover-mar 5 . 2004)
- 7) Complementary and alternative cardiovascular medicine: clinical and book (contemporary cardiology set) (contemporary cardiology) by Richard A. Stein and Mehmet C Oz (hardcover-mar 5 . 2004)
- 8) The cardiovascular cure: how to strengthen your self defense against heart attack and stroke by John P Md Phd Cooke and Judith Zimmer (paperback- Aug 12, 2003)
- 9) Cardiovascular and pulmonary physical therapy : an evidence-based approach by William DeTurk and Lawrence p Cahalin (hardcover-mar 12 . 2004)
- 10) Integrative manual therapy for the connective tissue system Myofascial release by Sharon Giammatteo , jay kain , and Thomas Giammatteo (hardcover-Nov 10 . 2004)

### **Respiratory Medicine/Critical Care Medicine**

1. Chest medicine essentials of pulmonary and critical medicine. Ronald I. George, 3rd edition (Williams and Wilkins)
2. Annual of Intensive Care Medicine, Irwin and Rippe, 3rd edition
3. Textbook of respiratory Diseases, Crofton and Douglas
4. A practical guide to pulmonary medicine, Goldstein
5. Interpretation of Pulmonary Function Tests, Hyatt, Scalan
6. Swasa Sanjeevani, Athma, Subramanyam G: (Vishalandra publishing house, Hyderabad 2000)

### **Nephrology**

- 1) Textbook of renal disease, Judith, Lawrence, 2nd edition (Churchill Livingstone)
- 2) Diseases of Kidney, Schrier, 6th edition (Little Brown)
- 3) Manual Of nephrology

### **Gastro – Enterology**

- 1) current diagnosis biliary and treatment in gastroenterology
- 2) disease of the liver and system – s Sherlock, Dooley, 10th edition (Blackwell sciences)
- 3) gastrointestinal and liver diseases – mark Feldman, Bruce Scharschmidt 6th edition (Saunders)
- 4) Schiff's diseases of the liver - Schiff's , 8th edition
- 5) Healing digestive disorders natural treatment for gastrointestinal conditions by Andrew Gaeddert (paperback – Feb 25, 2004)
- 6) Natural stomach care: treating and preventing digestive disorders with the best of eastern and western healing therapies by Anil Minocha (paperback – Aug 7, 2003)
- 7) Hydrotherapy: simple treatment for common ailments by Clarence W. Dail and Charles S. Thomas (paperback – Sep 1989)
- 8) The Duke Encyclopedia of New Medicine: Conventional and Alternate Medicine for All Ages by; The Duke Center for Integrative Medicine, Rich Liebowitz, Linda Smith, and Tracy Gaudet (Hardcover – Nov 14, 2006)
- 9) The American Physical Therapy Association Book of Body Maintenance Repair by Steve Vickery and Marilyn Moffat (paperback – April 15, 1999)
- 10) Fasting and Eating for Health: A Medical Doctor's Program for Conquer Disease by Joel Fuhrman and Neal D. Barnard (paperback – April 15, 1995)

### **Immune System, Connective tissue and joints**

1. Healing Immune Disorder: Natural Defense – Building Solution by Anderson Gaeddert (paperback – Nov 8, 2005)

### **Rheumatology**

1. Rheumatology , John Klippel, 1994

### **Endocrinology**

- 1) William's textbook of endocrinology, Wilson Fuster, 9th edition (W.B. Saunders)
- 2) User's Guide to Thyroid Disorders (Basic Health Publications User Guide) by Kathleen Barnes (paperback – Mar 2, 2006)



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### **PAPER III**

## **DIAGNOSIS USING CONVENTIONAL MEDICINE & NATUROPATHY AND THE NATUROPATHIC TREATMENT FOR THE DISORDERS**

### **Neurological disorders**

- Nervous system Dysfunction: faintness, syncope, dizziness, vertigo; weakness, abnormal movements and imbalance; episodic muscle spasms, cramps, weakness; numbness, tingling and sensory loss, acute confusional states; aphasia and other focal cerebral disorders; memory loss and dementia;
- Disorders of sleep and circadian rhythms.
- Approach to the patients with Neurologic Disease. Knowledge about conventional treatments
- Electro-physiologic studies of the central and peripheral nervous systems; Neuro-imaging techniques in neurological disorders
- Diseases of the Central Nervous System – Migraine and Cluster headache syndrome, seizures and epilepsy; Alzheimer’s disease and other primary dementia; Parkinson’s disease and other extra pyramidal disorders; ataxic disorders; disorders of ANS: disorders of cranial nerves; diseases of spinal cord
- Disorders of The Nerves And Muscles – Diseases of the peripheral nervous system; Myasthenia gravis, Muscular dystrophy and Other diseases of neuromuscular junction; Diseases of muscle
- Chronic fatigue syndrome
- Alcoholism and drug dependency – alcohol and alcoholism – opioid drug abuse and dependence
- Neurological rehabilitation

### **Dermatological disorders**

- Alteration in the skin – Approach to the patient with skin disorders
- Approach to the patient with dermatological diseases knowledge about conventional treatments
- Disorders of skin- Eczema, Psoriasis, Acne Vulgaris, Allergic dermatitis; other common skin disorders; skin manifestation of internal disease.

### **Psychiatric disorders**

- Approach to the patient with psychiatric disease. Knowledge about conventional treatments.
- Anxiety neurosis; depression; obsessive compulsive disorders, manic depressive psychosis; bipolar disorders; mood disorders; personality disorder; psychosis.
- Psychiatric rehabilitation

### **Oncology**

- Approach to the patient with cancer. Knowledge about conventional treatments
- Psychosocial factors in the etiology and pathogenesis of cancer
- Benign and Malignant carcinomas, Knowledge about congenital diagnostic procedure, radiotherapy and chemotherapy
- Principles and practice of Integrative Oncology (i.e) use of congenital and natural management strategies and psychosocial care in oncology.

- Psychosocial rehabilitation

### **Obstetrics and Gynecology**

- Approach to the patient with Pregnancy. Knowledge about conventional care
- Anti – natal care; maintenance of normal pregnancy, child birth, post natal care
- Approach to the patient with Gynecological complaints. Knowledge about conventional care.
- Menstrual disturbance, Infertility, Uterine diseases; Ovarian diseases; Pelvic tumors
- Family planning procedures.

### **Disorders of the Eyes, Ears, Nose and Throat**

- Approach to the patient with ENT disorder. Knowledge about conventional treatment
- Disorder of the Eye and management through naturopathy
- Disorders of Nose, Ears and Throat and its Management

### **Neutraceuticals and Natural herbs in health and diseases**

- Critical evaluation of dietary and Nutritional requirement
- Vegetarianism and its impact on health and disease
- Rational use of natural dietary supplements
- Clinical implication of commonly used natural herbs from all cultures and traditions.

### **Environmental and occupational health hazards** – Specific environmental and occupational hazards related to

- Food products
- Cosmetics
- Drugs
- Indoor and Outdoor living environment, work environment and ergonomics

### **Reference book and other materials:**

#### **Neurology**

- principles of Neurology – Adam's, victor, 6th edition (McGraw Hill)
- Diseases of the brain – Ed Brain, John Walton, 10th edition (oxford univ)
- Neurological differential diagnosis – John Patten
- Evidence – Based Neurology: Management of Neurological Disorders (Evidence based Medicine) by Charles Warlow, Richard Hughes, Bernard Uitdehaag, a Alessandro Liberati (Hardcover – May 1,2007) – Illustrated
- Attention Deficit Hyperactivity Disorder (The Latest Assessment and Treatment Strategies) by C. Keith, Ph .D. Connors and Juliet L. Jett (Paperback 12,2003)
- Complementary and Alternative Medicine and Multiple Sclerosis by Allen C Bowling (Paperback – Nov 13,2006)

#### **Dermatology**

- Healing skin Disorder: Natural Treatments for Dermatological conditions by Andrew Gaeddert (Paperback – Aug 12, 2003)

#### **Psychiatry**

- Clinical Handbook of Psychological Disorders, Third Edition: A Step – by – Treatment Manual (Hardcover), David H Barlow, The Guilford Press; 2001
- The Physician Guide to Depression and Bipolar Disorders by Dwight L E and Dennis S Charney (Paperback – Nov 10.2005)
- Physical Therapy The Truth: For Students, Clinicians, and Health Professionals by

Monie Phillips PT (Paperback – April II.2006)

### **Geriatrics/ Gerontology**

- Geriatric Medicine, 3rd edition

### **Oncology**

- Principles and practice of oncology, De Vita
- Clinical oncology (Books with CD-Rom for Windows & Macintosh) by Raymond E., Jr. Lenhard, Robert T. Osteen, and Ted Gansler (Hardcover – Nov 1,2000) – Illustrated
- An Introduction to Psycho – oncology by Patrice Guex (Paperback – Dec 22, 1993)
- Cancer Nursing: Principles And Practice (Jones and Bartlett series in Oncology) by Connie Henck Yarbro, .Margaret Hansen Frogge, and Michelle Goodman (Hardcover – April 18,2005)
  
- Oxford Handbook of oncology (oxford Handbooks) by James Cassidy and D Bissett (Paperback – Jun 15,2002)
- Lecture Notes: Oncology (Lecture Notes) by Marki Bower and Jonathan Waxman (Paperback – Mar 1,2006) – Illustrated
- Herb – Drug Interactions in Oncology by Barrie R. Cassileth and Charles D Lucarelli (Paperback – Jul 1,2003)

### **Neutraceuticals and natural herbs in health and disease**

- The American Pharmaceutical Association Practical Guide to Natural. Medicines by Andrea Peirce (Hardcover – Mar 3, 1999)
- The Natural Medicine Guide to Bipolar Disorder (The Healthy Mind Guides) by Stephanie Marohn (Paperback – Mar 2003)
- The PMDD Phenomenon : Breakthrough Treatments for Premenstrual Dysphoric Disorder (PMDD) and extreme Premenstrual Syndrome by Diana L. Dell and Carol Svec (Paperback – Sep 25,2002)
- Bountiful, Beautiful, Blissful: Experience the Natural Power of Pregnancy and Birth with Kundalini Yoga and Meditation by Gurmkh Kaur Khalsa and Cindy Crawford (Paperback –Jun 1, 2004)

### **Environmental and occupational health hazard**

- Environmental and occupational health hazard (Clinics in Laboratory Medicine, 4:3) by Robert V. Blanke (Hardcover – 1984)
- Illustrated Dictionary and resource Directory of Environmental and occupational health, Second Edition by Herman Koren (Hardcover – May 11,2004)
- occupational hazard and Human Health by Richard B. Philp (Hardcover – April 13,1995)
- Environmental and Industrial Health Hazards A Practical Guide by R.A Trevethick (Hardcover – Jun 1976)
- Agricultural medicine: occupational and environmental health in agriculture for the health professions by Kelley j. Donham and Anders Thelin (Hard cover-may 1, 2006)-illustrated
- Energy medicine in therapeutics & human performance by James J. Oschman(paperback-Mar 8, 2003)

### **Physical therapy**

- Handbook of pediatric physical therapy by Toby Long and Kathy Toscano (paperback- Sep 1,2001)

- Occupational Therapy: Practice Skills for Physical Dysfunction by Lorraine Williams Pedretti and Mary Beth Early (Hardcover – Jan 15,2001)
- Introduction to Physical Dysfunction by Michael A. Pagliarulo (paperback – Jul 31,2006)
- Occupational Therapy for Physical Dysfunction by Mary Vining Radomski and Catherine A Trombly (Hardcover – Mar 1,2007)
- Physical therapist Examination Review by Theresa Meyer (paperback – Nov 30,2001)
- Guide to Physical Therapist Practice by Apta and American Therapy Association (paperback – Jan 2001)
- Quick Reference to Physical Therapy by Julie A.Pauls and Kathlyn L Reed (paperback – Nov 2003)

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#### **PAPER IV RESEARCH METHODOLOGY AND RECENT ADVANCES IN NATUROPATHY**

##### **Research methodology**

Planning a research study, Research problems-Identification of research problems, Hypotheses and Assumptions, Literature Review including Database searches.

Research approaches and study Designs-Elements of research Designs, Selection of research design, and Types of research designs.

Assessment Techniques and Tools and methods of Data Collection, Fundamentals of Medical Statistics and Writing, Project proposal preparation.

##### **Recent advances**

- Psycho neuro immunology [PNI] and Psycho neuro endocrinology – explaining the mind – body connection in disease and health
- Psychophysiology of biological rhythms , emotions , behaviour and aging
- Stress and its impact on health and disease: Physiological mechanisms underlying ‘stress response’ and its recent advanced management.
- Psychosomatics and psychosomatic medicine – Role of human thinking, behavior and life style in the etiology, pathogenesis, clinical manifestations and management of non-communicable life-style related diseases.
- Lifestyle and psychosocial behavior-health educational and natural medicine in prevention in high risk groups, effective management of chronic lifestyle related disease and minimization of subsequent medical complications
- Inherent healing capacities and natural therapies; concept of spontaneous regression, role of positive thinking, health behavior and natural therapies in spontaneous regression; clinical implications of natural therapies in eliciting inherent healing capacities.
- Natural and holistic medicine – integrating the physical, psychological, mental, social and spiritual needs of an individual in promotion of positive health, prevention of diseases and disabilities, management of diseases and overall improvement in ‘quality of life’.
- Advances in therapies used in naturopathy
- Advances in medical & psychiatric rehabilitation
- Integrative medicine

### **Reference book and other materials:**

- Basic Research Methodology-Methods and techniques(second revised edition)-C.R.Kothari
- Textbook on Nursing Research methodology and statistics by Suresh K Sharma-Published by Elsevier-ISBN:978-81-312-2537-0

### **Research methods and statistics**

- 1)Research methods for therapists. Avril Rummond, Jo Campling, Nelson, Thornes, 1996
- 2)Complementary and Alternative Medicine: Legal Boundaries and Regulatory Perspectives by Michael H Cohen (paperback – Aug 19, 1997)
- 3)Regulation of functional foods and Nutraceutical L A Global Perspective (Institute of Food Technologist) by Clare Hasler (Hardcover – Mar 1,2005) – Illustrated
- 4)The Principles and Practice of Hydrotherapy: A guide to the Application of Water In Disease For Students and Practitioners of Medicine by Simon Barunch (paperback – Jul 9,2006)
- 5)Massage therapy career guide by Steve Capellini (paperback – Oct 12,1998)
- 6)Research papers on all concerned topics from peer reviewed journals

## **COURSE CONTENTS - M.D (YOGA)**

### **PAPER I**

### **APPLIED BASIC MEDICAL SCINECES AND CONCEPTS OF HEALTH & DISEASES IN YOGA**

#### **1.1Philosophy and practice of Yoga:**

Principles of yoga from traditional yoga texts; Comprehensive understanding of concepts of health and disease as described in (i) Vedas, (ii) Upanishads, (iii) Bhagavad- Gita, (iv) Yoga vasista, (v) Patanjali Yoga sutras and (vi) Hatha yoga texts, history & evolution of yoga as a therapy in mind-body medicine; principles and practice of traditional yoga techniques and derived techniques from reputed yoga schools based on the descriptions from the ancient texts, philosophical and scientific basis of yoga as a technique for self- empowerment, slates of consciousness as enunciated by Upanishads and their relevance to health, principles of health promotion, disease prevention, healing and quality of life in yoga; relevance of yoga along with naturopathy in the prevention and management of stress related/lifestyle related disorders; relationship between yoga, health and spirituality; insights from yoga for women's & child health; use of yoga as an effective therapy for difference socio-economic populations.

#### **1.2Applied Basic Medical Sciences Relevant To Yoga:**

Applied anatomy, applied physiology and Biochemistry related to advancement in understanding the physiological effects of different yoga techniques; applied basic medical sciences in establishing the physiological basis for symptomatology and indicators of health & disease used in yoga for example, breathing patterns related to different mental states and association of distinct breathing patterns and changes with physical and mental disorders.

Microbiology and pathology related to advancement I understanding of Pathophysiology and pathogenesis relevant to the concepts of health and disease in yoga. Clinical Pharmacology\*- Introduction to principles of drug therapy; Adverse reactions to drugs; Physiology and pharmacology

of the autonomic nervous system; Nitric oxide and its' biologic and medical implications.

\*This provides the required knowledge to handle patients who are on conventional medications while offering yoga therapy.

### **1.3. Physiological Basis and Clinical Relevance Of Yoga** **Physiological effects of techniques used in yoga viz.**

- Yoga bases cleansing techniques [Kriyas]
- Yoga postures [Asanas],
- Breathing exercises
- Yoga based voluntarily regulated breathing (Pranayamas)
- Guided relaxation (Yoga Nidhra)
- Meditation (Dhyana)
- Derived techniques of various traditional & reputed schools
- Yoga bases psychological counseling

### **1.4. Clinical relevance of therapies used in Yoga:**

Clinical applications and underlying mechanisms for the individual and combinations of yoga techniques used in yoga. The disease specific yoga modules are evolved based on (i) traditional descriptions of therapeutic benefits of yoga techniques, (ii) available physiological effects of yoga techniques and (iii) clinical observations.

### **1.5. Reference Books:**

#### ***Anatomy/physiology/Biochemistry/Biostatics***

- Samson Wright's Applied Physiology, Oxford University Press (India). 198
- Clinical Anatomy: A Revision and Applied Anatomy for Clinical. Students, Harold Ellis, Blackwell Publishing, 2006.
- Applied Biochemistry of Clinical Disorder (Hardcover). Allan G. Gornall, Lippincott Williams & Wilkins, 1981.
- Clinical Handbook of psychological Disorders, Third Edition. A step-by-step Treatment Manual (Hardcover), David H. Barlow. The Guilford Press; 2001
- Essentials of Pathophysiology: Concepts of Altered Health States Car Mattson Porth, Lippincott Williams & Wilkins, 2006.
- Basic pharmacology (paperback). Perspective Press (Editor), Morton Publishing Company; 2000
- Clinical Neuroanatomy for medical students. 4th edition.
- Textbook of medical physiology, Guyton. 9th edition.
- Review of medical physiology, Ganong, 18th edition.
- Harper's Biochemistry, 25th edition.

- Lippincott's illustrated review – biochemistry, 2n edition.
- Methods in Biostatistics, B.K. Mahajan, 6th edition.

### **1.6. Pharmacology/microbiology/pathology:**

- Textbook of pharmacology, Goodman and Gillmann's.
- Washington manual of Medical Therapeutics, 29th edition.

### **1.7. Yoga and allied science:**

- Complete Book of Yoga: Karma Yoga, Bhakti Yoga, Raja Yoga, Jnana Yoga (Hardcover) by Swami Vivekananda, Vijay Goel, 2005
- Hatha Yoga Pradipika (Light on Hatha Yoga) by Maharishi Swatimarama, translation and commentary by Swami Satyananda Saraswati and Swami Muktibodhananda, Bihar School of Yoga
- The Upanishads by Eknath Easwaran, nilgiri Press, 2007
- Wisdom of the Vedas (Theosophical Heritage Classics) by J. C. Chatterji, Quest Books, 1992.
- The science of yoga (A commentary on Patanjali's Yoga Sutras). By I.K. Taimini; the Theosophical publishing House, 2005.
- The Bhagavad-Gita (Classics of Indian Spirituality) by Eknath Easwaran, Nilgiri Press; 2007
- Vasistha'Yoga by Venkatesnanada (Author), Stale University of New York Press. 1993
- Asana Pranayama Mudra Bandha by Swami Satyananda Saraswati, Bihar School of Yoga. 2000
- Prana Pranayama Prana Vidya by Swami Niranjanananda Saraswati, Bihar School of Yoga, 2000
- Yogic Nutrition by Gina L. Nick. LTP Publishing, 2005
- Yoga for Health, Relaxation and Well-Being (Gotta Minute) by Nirvair singh Khalsa, 2001
- Meditation As Medicine: Activate the Power of Your Natural Healing Force (paperback) by Dharma Singh Khalsa, Simon & Schuster, 2002
- Meditation: classic and contemporary perspectives by Deane H. Shapiro, Roger N. Walsh, Aldine Transaction, 1984
- The power of Yoga: Health, Exercise, Stress Relief & Relaxation, Mind & Spirit it by vimla Lalvani, 2004
- Yoga for Health by Richard Hittleman, 1985
- Dr. Yoga: A complete Guide to the Medical Benefits of Yoga (Yoga for Health) by Nirmala Heriza, Dean Ornish, and C Noel Bairey Merz, 2004
- Hatha Yoga Pradipika Swami Muktibodhananda (Yoga Publications Trust, Munger Bihar 1993)
- Yoga for Wellness: Healing with the Timeless Teachings of viniyoga by Gary Kraftsow (paperback – Oct 1, 1999)
- Yoga for your Type: An Ayurvedic Approach to Your Asana Practice by Dr. David Frawley and Sandra Summer Qeld Kozak
- Dr. Yoga: A Complete Guide to the Medical Benefits of Yoga (Yoga for Health) by Nirmala Heriza, Dean Ornish, and C. Noel Bairey Merz (paperback – Sep 9 2004)
- Light on Yoga, the bible of modem yoga... By b. K. S. Iyengar and yehudi Menuhin (paperback – Jan 3, 1995)

- The sivananda companion to yoga: a complete guide to the physical postures, breathing exercises, diet, relaxation, and meditation techniques of yoga by Sivanda yoga center and vishnu devananda (Paperback – April 19, 2000)
- The Sivananda Companion to Meditation. How to Master the Mind and Achieve Transcendence by Sivananda Yoga center and Sivananada Yoga Vedanta Centers (Paperback- 9, 2003)
- Thirty Minor Upanisad K. Narayana swami Aryar (Panmal Publications, Dehh 2003)
- The Science of Yoga. I. K. Taimini. (The Theosophical Publishing House. Adyar Chennai 2005)
- TM Discovering Inner Energy and Overcoming Stress. Harhold H Bloomfield (Doll Publishing Company Inc., New York 1975)
- Prana – Pranayama –prana Vidya Swami Niranjananda Saraswati (Yoga Publications Trust, Munger Bihar 1994)
- Anatomy of Hatha Yoga: A Manual for Students, Teachers, and Practitioners by H David Coulter, (Hardcover – Oct 2001)
- Anatomy of Hatha Yoga. H. David Coulter. (Body and breath Inc US 2001)
- The philosophy, psychology and practice of yoga Swami chidananda. (TI Divine Life Society UP Himalayas 1991)
- The Principal Upanisads Swami Sivananda. (The Divine Life Society UP Himalayas 4th Ed 1988)

- Meditation and Mantras. Swami Vishnu Devananda (motilal banarasidas Publishers pvt ltd 3rd Ed 2003)
- Soul Mind Body Medicine: A Complete Soul Healing System for Optimur Health and vitality by Zhi Gang Sha (Paperback –April 14, 2006)
- Yoga, Tai chi, massage, Therapies & Healing Remedies (Paperback – 2003)
- Naturopathy and Yoga by Parvesh Handa (Hardcover – Oct 30, 2006)
- Speaking of Yoga for Health (Your Health Guide) by Institute Of Naturopathy (paperback – Dec 6, 2003)

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## **PAPER II**

### **DIAGNOSIS USING CONVENTIONAL MEDICINE & INDICATORS OF DISEASE PROCESS IN YOGA AND THE THERAPEUTIC YOGA MANAGEMENT OF DISORDERS**

#### **2.1 Disorders of the cardiovascular system:**

*Alterations in circulatory and respiratory junctions-* Dyspnea; cough; approach to the patient with a history of a stable angina: approach to the patients with hypertension, cyanosis; edema; shock.

Diagnosis and approach to the patient with heart disease- physical examination of the cardiovascular system. Knowledge about conventional treatments

Disorders of the heart; normal and abnormal myocardial functions; heart failure; congenital heart diseases in the adult; rheumatic fever; valvular heart disease; cor pulmonale; cardiomyopathies; myocarditis; pericardial diseases; cardiac manifestations of systemic disease

Vascular disease; atherosclerosis; acute myocardial infarction; ischemic heart disease;



hypertensive vascular disease; vascular disease of the extremities.  
Cardiac rehabilitation

## **2.2 Disorders of the respiratory system:**

Diagnosis and approach to the patient with diseases of the respiratory system.  
Knowledge about conventional treatments

Disturbances of respiratory system; disturbances of respiratory functions  
Disease of the respiratory system; bronchial asthma; chronic bronchitis; COPD; emphysema and airway obstruction; disorders of ventilation, sleep apnea; acute respiratory distress syndrome.  
Pulmonary rehabilitation

## **2.3 Disorders of kidney and urinary tract:**

*Alterations in urinary functions and electrolytes;* cardinal manifestations of renal disease; voiding dysfunction, incontinence and bladder pain; fluid and electrolytes imbalance; acidosis and alkalosis.

*Alterations in the urogenital tract:* impotence; disturbances of menstruation and other common gynecologic complaints in women.

Approach to the patient with the disease of kidneys and urinary tract. Knowledge about conventional treatments. Disturbances of renal function, acute renal failure and chronic renal failure.

## **2.4 Disorders of the gastrointestinal system;**

*Alterations in gastrointestinal functions:* dysphagia, nausea, vomiting and indigestion, diarrhea and constipation, bleeding; jaundice abdominal swelling, ascitis.

Approach to the patient with the disease of gastrointestinal disease. Knowledge about conventional treatments.

Diseases of esophagus; peptic ulcer and related disorders; disorders of absorption; IBS; ulcerative colitis and crohn's disease

Liver and biliary tract diseases; approach to the patient to the liver disease, evaluation of liver function, derangement of hepatic metabolism, bilirubin metabolism and Hyperbilirubinemia; toxin and drug induced hepatitis; crohn's hepatitis; cirrhosis and alcoholic liver disease; infiltrative and metabolic diseases affecting the liver, disease of gall bladder and bile ducts.

Disorders of pancreas-acute and chronic pancreatitis

## **2.5 Disorders of the immune system, connective tissues and joints:**

Hematological alterations-anemia; bleeding and thrombosis; enlargement of lymph nodes and spleen.

Pain- pathophysiology and management –chest discomfort and palpitation abdominal pain-headache-back and neck pain

Approach to the patient with the disorders of the immune system, connective tissues and joints. Knowledge about conventional treatments.

Disorder of immune system- introduction to immune system ;major histocompatibility ; primary immune deficiency disease; HIV disease; AIDS and related disorder; amyloidosis

Disorders of immune mediated injury-diseases of immediate type hypersensitivity; SLE; rheumatoid arthritis; dermatomyositis and polymyositis; sjogren's syndrome; ankylosing spondylitis undifferentiated spondyloarthritis; behcet's syndrome; the vasculitis syndrome; sarcoidosis. Disorders of joint—approach to articular and musculoskeletal disorders; osteoarthritis; arthritis due to deposition of calcium crystals; infectious arthritis; psoriatic arthritis and arthritis associated with gastro intestinal disease; relapsing poly chondritis and other arthritides.

## **2.6 Endocrinology and metabolism:**

Alterations in body temperature: fever and hyperthermia; fever and rash, hypothermia  
Endocrinology- Approach to the patient with the disorders of the endocrinology and metabolism Knowledge about conventional treatments.

Obesity; anorexia nervosa and bulimia nervosa; enteral and parenteral nutritional therapy; vitamin deficiency and excess; disturbance in trace elements

Neuroendocrine regulation and disease of anterior pituitary and hypothalamus; disease of thyroid; disease the adrenal cortex; pheochromocytoma; diabetes mellitus; hypoglycemia; disorders of the testes, ovary and female reproductive tract; endocrine disorders of breasts; disorders affecting multiple endocrine system.

Disorders of intermediary metabolism- disorders of lipoprotein metabolism: hemochromatosis; porphyrim; gout and other disorders of urine metabolism.  
Disorders of bone and mineral metabolism- calcium, phosphorous, bone metabolism; calcium regulating hormones; disease of the parathyroid glands; metabolic bone disease, disorders of phosphorus metabolism

## **2.7 reference books**

### **Cardiology**

- The clinical recognition of congenital heart disease-Joseph K.Perloss,4th edition(jaypee)
- An introduction to ECG- Leoschamroth, 7th edition Black well science
- Practical electrocardiography-Marriot,9th edition
- Text book of cardiovascular medicine-Eugene Braunwald, 5th edition
- The heart- Hurst,9th edition
- Congenital heart disease in adult- Perloff, 2nd edition.
- Cardiovascular and pulmonary physical therapy: an Evidence-based approach by William E.DeTurk and Lawrence P Cahalin
- Complementary and alternative cardiovascular medicine: Clinical hand book(contemporary cardiology ser ) (contemporary cardiology) by Richard A Stein and Mehmet C Oz (hard cover-march 5,2004)
- Heart disease and cardiovascular health by Richard Saul Wurman (paper back- feb 21, 2001)
- Yoga for transformation: ancient teaching and practices for healing the body, mind

and heart by gary kraftsow (paper back- june 4,2002)

- Yoga for hypertension and heart disease Nagarathna R and Nagendra S R (swami Vivekananda yoga prakasana, Bangalore,2000)
- Yoga daily planner-heart care (the Yoga institute, Santacruz (east) Mumbai)
- How to reverse heart disease in yogic way- Research fact and programme Cyclopedia (The Yoga institute ,Santacruz (east) Mumbai)

## **2.8 Respiratory medicine/critical care medicine:**

- Chest medicine essentials of pulmonary and critical medicine Ronald George, 3rd edition (Williams and wilkins)
- Manual of intensive care medicine, Irwin and Rippe, 3rd edition
- Textbook of respiratory disease ,Crofton and Douglas
- A Practical guide to Pulmonary function Tests. Hyatt, Scalan.
- Respiratory function of the upper airway (Lung Biology in Health and Disease) by O.P Matthew (Hardcover-Mar 30,1988)
- Breathing free : revolutionary 5-day program to heal asthma, emphysema, bronchitis and respiratory ailments by Teresa hale and leo galland pharmacology of respiratory tract(Lung biology in health and disease)by Chung (hard cover- June 30,1993)
- The Little book of yoga breathing: pranayama made easy by scott shaw (paper back Jan 2004).
- Yoga for asthma Nagarathna R and Nagendra H R. (Swami Vivekananda Yoga prakasana. Bangalore, 2000)
- Yoga for Breathing practices. Nagendra H R and Swami Vivekananda Yoga prakasana, Bangalore 2000
- The Yoga institute Santacruz Mumbai. Yoga therapy in Asthma, Diabetes and Heart disease (The Yoga institute, santacruz (east) mumbai Yogic Life- A Cure for asthma and bronchitis (The Yoga institute, Santacruz (east) Mumbai)

## **2.9 Nephrology**

- Textbook of renal disease , Judith, Lawrence, 2nd edition (Churchill Livingstone)
- Diseases of kidney, Schrier, 6th edition (Little Brown). Manual of Nephrology.

## **2.10 Gastro-Enterology**

- Disease of the liver and system- S .Sherlock. Dooley. 10th edition (Black well sciences)
- Gastro intestinal liver disease – Mark Feldman, Bruce Scharschmidt, 6th edition(Saunders)
- Schiff's disease of the liver-schiff's 8th edition
- Yoga for digestive disorders. Nagarathna R and Nagendra H R Swami Vivekananda Yoga prakasana,Bangalore,2000)

## **2.11 Immunology, connective tissues and joints**

- Rheumatology ,John Klippel,1994.
- Yoga for Arthritis. Nagarathna R and Nagendra H R Swami Vivekananda Yoga prakasana, Bangalore, 2000)
- Yoga for back and joint disorder (B&W) (The Yoga institute Santacruz (east) Mumbai)

## **2.12 Endocrinology**

- William's text book of endocrinology, Wilson Fuster,9th edition (W.B. Saunders)
- User's guide to thyroid disorders (basic health publications user's guide) by Kathleen Bames. (paperback- mar 2,2006)
- Yoga for Diabetes Nagarathna R and Nagendra H R (Swami Vivekananda Yoga Prakasana. Bangalore, 2000)
- Yogic life control of Diabetes (The Yoga Institute Santacruz (east) Mumbai).

## **2.13 General books**

- Yoga for transformation : ancient teachings and practice for healing the body, mind and heart by Gary Kraftsow
- Dr.Yoga : A Complete guide to the medical benefits of Yoga (Yoga for health) by Nirmala Henza, daen Ornish and C.noe bairey Merz ( Paperback – sep 9 2004)
- Therapeutic Yoga by J T Shah
- Common disorders, natural remedies by Eileen Renders( Paperback Jan 1 2002)
- Yoga mind, body & spirit : A return to wholeness by donna farhi( paperback- may 1 2000)
- Yoga for common ailments. Robin Monoro., Nagarathna R and Nagendra ,H.R Guia publication UK
- The New Yoga for Healthy ageing. Living Longer, Living Stronger and Loving every day by Suza Francina and Jim Jacobs

## **PAPER III**

### **DIAGNOSIS USING CONVENTIONAL & INDICATORS DISEASE PROCESS IN YOGA AND THE THERAPEUTIC YOGA MANAGMENT OF DISORDERS**

#### **3.1 Neurological disorders:**

Nervous System Dysfunction: Faintness, syncope, dizziness, vertigo; weakness abnormal movements and imbalance; episodic muscle spasms, cramps weakness: tingling and sensory loss, numbness; acute confusional states, other focal cerebral disorders: memory loss and dementia; disorders of sleep and circadian rhythms  
 Approach to the patient with neurologic diseases Knowledge about conventional treatments.  
 Electro-physiologic studies of central and peripheral nervous system, neuroimaging in neurological disorders.

Diseases of the central nervous system –migraine and cluster headache syndrome; seizures and epilepsy; Alzheimer's disease and other primary dementias; Parkinson's disease and other pyramidal disorders; ataxia disorders; disorders of ANS; disorders of cranial nerves; disease of spinal cord; disorders of the nerves and muscles- disease of the peripheral nervous system; myasthenia gravis; muscular dystrophy other disease of neuromuscular junction; disease of muscle

Chronic fatigue syndrome

Alcoholism and drug dependency-alcohol and alcoholism–opioid drug abuse and dependence.

Neurological rehabilitation

### **3.2 Dermatological disorders**

Alterations in skin-approach to the patient with skin disorders.

Approach to the patient with dermatological diseases, Knowledge about conventional treatments

Eczema; psoriasis; acne vulgaris; allergic dermatitis, other common skin disorders; skin manifestation of internal disease

### **3.3 Psychiatric disorders**

Approach to the patient with psychiatric disease, Knowledge about conventional treatments.

Anxiety neurosis ; depression; obsessive compulsive disorders; manic depressive psychosis; bipolar disorder; mood disorders; personality disorder;

Psychiatric rehabilitation

### **3.4 Oncology**

Approach to the patient with cancer, Knowledge about conventional treatments

Psycho-social factor in the etiology and pathogenesis of cancer

Benign and malignant carcinomas, knowledge about conventional diagnostic procedures, radio therapy and chemotherapy

Principal and practice of integrative oncology i.e., use of conventional and natural management strategies and psycho-social care in oncology

Psychosocial rehabilitation

### **3.5 Obstetrics and Gynecology**

Approach to the patient with pregnancy, Knowledge about conventional care.

Antenatal care; maintenance of normal pregnancy; child birth; post natal care

Approach to the patient with gynecological complaints, Knowledge about conventional care.

Menstrual disturbances. Infertility; uterine diseases; ovarian diseases; pelvic tumours.

Family planning procedures

### **3.6 disorders of Eyes, Ears, Nose and Throat**

Approach to the patient with ENT diseases, Knowledge about conventional treatments  
Disorder of the eye, disorders of nose, ears and throat

### **3.7 environmental and occupational health hazards**

Specific environmental and occupational hazards related to food products, cosmetics, drugs, and indoor and outdoor living environment; work environment and ergonomics

## **4. NUTRITION AND YOGA BASED DIET IN HEALTH AND DISEASE**

Critical evaluation of dietary requirements; vegetarianism and its impact on health and disease; rational use of diet 'based on concept of gunas' as described in Bhagavad Gita; clinical implication of Yoga based dietary recommendations

### **4.1 Reference books and other materials**

#### **Neurology**

- Principles of neurology –Adam's Victor, 6th edition(McGraw Hill). Disease of brain-Ed Brain, John Walton, 10th edition(oxford university) neurological differential diagnosis-John Patten
- Yoga for back pain. Nagarathna R and Nagendra H R (Swami Vivekananda Yoga Prakasana, Bangalore,2000)
- Evidence- based neurology: management of neurological disorders( evidence based medicine) by Charles Warlow, Richard Hughes, Bernard Uitdehaag, and Alessandro Liberati ( Hardcover- may 1 2007)
- Yoga for children with Autism spectrum disorder: A Step by Step guide for parents and caregivers by Dion E. Betts and Stacey W Betts ( paperback – may 15, 2006)
- Clinician's guide to Sleep disorders ( neurological disease and therapy) by Nathaniel F. Watson and Bradley V. Vaughn ( hardcover jan 13 ,2006)
- Treatment of pediatric Neurological disorders ( neurological disease and therapy ) by Harvey S Singer, Eric H. Kossoff , Adam L. Hartman, and Thomas O Crawford( hardcover – april 12 2005)
- Yoga mind, body & spirit: A Return to wholeness by Donna ( paperback- may 1,2000)
- Attention Deficit Hyperactive disorder( the latest assignment and treatment strategies ) by C Keith, Ph.D. Conners and Juliet L.( paperback- june 1999)
- The book of exercise and yoga for those with Parkinson's disease by Lord Newell ( plastic comb- feb 2005)
- Complementary and alternative medicine and multiple sclerosis by Allen C Bowling ( paperback nov 13, 2006)

#### **Dermatology**

- Dr. Yoga: A Complete Guide to the Medical Benefits of yoga (yoga for health ) by

Nirmala Heriza, Dean Ornish and C. Noel Bairey ( paperback- sep 9, 2004)

## **Psychiatry**

- Introduction to psychoneuroimmunology by Jorge H . Daruna
- Yoga for depression by Yoga.com
- Yoga beats the blues: Boost Your Mood, Memory and Concentration with Easy 5,10 and 20 – mins yoga routines by Donna( paperback – nov 1, 2003)
- Yoga for depression: A Compassionate Guide to Relieve Sufferings through Yoga by Amy Weintraub ( paperback- dec 23, 2003)
- Emotional yoga: How the body can heal the mind by Bija Bennet (paperback- aug 27, 2002)
- A text book of General Psychology. Girish Bala Mohanty. ( Kalyan publishers , Ludiyana 1986)
- Psychoeducation manual for Bipolar disorder by Francesc Colom, Eduard Vieta, and Jan Scott (paperback – dec 11, 2006)
- The Physicians guide to depression and Bipolar disorders by Dwighl L Evans and Dennis S. Charney( paperback nov 10, 2005)
- Mindfulness- based cognitive therapy for depression: A New Approach to Preventing Relapse by Zindel V. Segal, J.Mark G. Williams and John D Teasdale (hardcover- nov 14, 2001)
- Peaceful mind: Using mindfulness and cognitive behavioural psychology to overcome depression by John R Mcquaid , Paulae. Carmona and Zindel V Seagul ( paperback mar 2004)
- Yoga therapies: 45 Sequences to relieve stress , depression, repetitive strain, sports injuries and more by Jessie Chapman (paperback mar 2004)
- The Seven Spiritual laws of yoga: A Practical Guide to Healing body, mind, and spirit by Deepak, M D Chopra and David, M D Simon ( hardcover- june 21, 2004)
- Yoga for Stress relief: A Simple and Unique three month program for distressing and stress prevention by Swami Shivapremanandha ( paperback- jan 20 1998)
- Yoga for Anxiety& Depression: Nagarathna R and Nagendra H R ( Swami Vivekanandha Yoga Prakasana, Bangalore 2000)
- Abnormal Psychology The problem of Maladapative Behaviour. Irwin, Barbara R. Sarason. ( Prentice- hall, inc, USA 1996)
- Glimpses into Psychology of yoga Thaimini I.K . ( Thoesophical Publication house 1973)
- Mental health and Hindu Psychology : Swami akhilanandha ( Munshiram manohar publication , 1951)
- Yoga and Cancer : Nagarathna R and Nagendra H R ( Swami Vivekanandha Yoga Prakasana, Bangalore 2000)
- Yoga for depression: A Compassionate Guide to Relieve Sufferings through Yoga by Amy Weintraub ( paperback- dec 23, 2003)
- Kundalini Yoga meditation
- Techniques Specific for Psychiatry disorders , Couples therapy and Personal growth by David S. Shannahoff- Khalsa ( hardcover jan 2 , 2007 )
- Living Within : Yoga Approach to psychological health & Growth by Aurobindho and the Mother ( paperback- jan 1 ,1987)

## **Oncology:**

- Principles and practice of oncology , De Vita
- Clinical oncology ( book with CD- ROM for windows and Macintosh) by Raymond E., Jr. Lenhard. Robert T Osteen and ted ( hardcover nov 1,2000)
- An Introduction to Psycho-oncology by Patrice Guex ( paperback – Dec 22,1993)
- Cancer nursing: principles and practice(Jones and Bartett series in oncology)
- Oncology: an evidence based approach by Alfred E Chang and timothy kinsella(hardcover-nov 15, 2005)
- Oxford hand book of oncology by James Cassidy D Bissett(paperback- june 15, 2002)
- Lecture notes: oncology by mark Bower and Waxman(paperback march1, 2006)
- Herb- drug interaction in oncology by barrier and Charle Luarelli (june 1, 2003)

### **Obstetrics and gynecology**

- The hormone connection: revolutionary discoveries Linking hormone and woman's health problems by Gale Maleskey, Mary Kittel, and prevention health book for woman(paperback-nov3,2001)
- Natural prescriptions for woman what to do-and when to do it- to so more than 100 females health problems-without by Susan Berg .The editors of prevention health books(paper back-dec8,2000)
- Prevention's ultimate Guide to woman's health and wellness:action plan for more than 100 women's health problem by Susan J.Blumenthal.The editors of prevention health books for woman(paper back-dec3,2002)
- The woman's book of yoga and health:a lifelong guide to wellness by patricia walden, and Judith hanson( paper back-dec,2002)
- Yoga and the wisdom of menopause:a guide to physical, emotional and spiritual health at midlife and beyond by Suza Francina( paper back-apl 20,2003)
- The woman's yoga book :asana and pranayama for phases of the menstrual cycle by Bobby Clennell and geeta s iyengar
- Yoga for pregnancy : Nagarathna R and Nagendra H R ( Swami Vivekananda Yoga Prakasana, Bangalore 2000)
- The menstrual disorders by Annett Scamble( paper back-dec3,1992)
- The PMDD phemenon:breakthrough treatments for premenstrual Dysphoric Disorder and extreme pre menstrual syndrome by Diana L.Dell and Carol Svec( paper back-sep 25,2002)
- Pregnancy parenthood and yoga (the Yoga institute, Santacruz (east) Mumbai)

### **Environment and occupational hazards**

- Desktop Yoga by Julie Lusk ( paper back-nov 1,1998)

### **Agricultural medicine:**

- Occupational and Environmental Health in Agriculture for the Health professions by Kelley J Donham and Anders Thelin (Hardcover- may 1,2006)- Illustrated



## **Nutrition and yoga based diet in health and disease**

•Thee Yoga Cookbook; Vegetarian Food for Body and Mind by Sivananda Yoga Center and Sivananda Yoga Vedanta Centers (Paper back-march 29, 1999)

## **PAPER IV**

### **RESEARCH METHODOLOGY AND RECENT ADVANCES IN YOGA**

#### **Research methodology**

Planning a research study; techniques for literature review including computation data base searches; study designs; assessment techniques; medical statistics; medical writings; project proposal preparation.

#### **Recent advances**

Psycho - physiology of yoga in health and disease psychophysiology of biological rhythms, emotions, behavior and aging.

Psychoneuroimmunology (PNI) and psycho-neuroendocrinology- explaining the mind – body connection and disease

Stress and its impact on health and disease; physiological mechanism underlying “stress response; stress and infection; oxidative stress; stress and psychosomatics and stress and health behavior; stress and mental health; stress and lifestyle; stress and social aspects of medicine somatization and stress related disease. Psycho-somatic medicines-role of human thinking, behavior and lifestyle in the etiology, pathogenesis, clinical manifestations and management of non-communicable lifestyle related disease.

Mind - body medicine physiological basis of mind-body medicine; rational use of mind-body medicine to elicit (relaxation response) as an antidote to stress response and understanding the limitations.

Lifestyle and psychosocial behavior-health education and yoga in prevention in high risk groups, effective management of chronic lifestyle related diseases and minimization of subsequent medical complications.

Inherent healing capacities and yoga therapies– physiological basis of inherent healing capacities of human body and mind; concept of spontaneous regression; role positive thinking, health behavior and yoga therapies in spontaneous regression; and clinical implications of yoga therapies in eliciting inherent healing capacities.

Religious faith, spirituality and medicine role of faith in health and disease; spirituality, spiritual practices in health and diseases; health behavior, positive thinking and copying behavior related to faith and spirituality;

“Contemplative Neuroscience”: states of Consciousness and health. Yoga and holistic

medicine- integrating the physical, psychological, mental, social and spiritual needs of an individual in promotion of positive health prevention of diseases and disability, management of diseases and overall improvement in “quality of life”. Traditional significance modern relevance and clinical implication of derived yoga techniques by Indian Gurus and institutions viz. i) Maharishi Mahesh yoga Transcendental meditation, ii) Goenka-Vipasana meditation, iii) Prajapathi Brahmakumaris vishwa vidhyalaya-Raja yoga meditation, iv) Behar school of yoga- yoga Nidra, v) Swami Vivekananda Yoga Research foundation-cyclic meditation, vi) art of Living Foundation- sudarshan Kriya yoga, vii) Sahaja Yoga, viii) Kundalini yoga

Traditional significance, modern relevance and clinical implication of derived yoga techniques by “yoga gurus and institutions from other cultures” viz.(i) Tibetan yoga- G-Tum-Mo meditation, (ii) Chinese mind modifying techniques-Qi-Gong and Taichi. (iii) Japanese Zen meditation, (iv) Christian Contemplative meditation, (v) Herbert Benson’s Relaxation response and (vi) Kabat-Zinn’s meditation.

Western psychology and Indian psychology: fundamental principles, techniques and their implications on Consciousness studies and mental health.

Comparative studies between yoga and other Mind-body medicine techniques [Art therapy, Dance therapy, Psychotherapy, Hypnotherapy, Guided imaginary and Biofeedback]

### **References books & other materials:**

- Research methods and statistics
- Research methods for therapists Avril Rummond, Jo Campling, Nelson, Thomas, 1996
- Yoga research bibliography scientific studies on yoga and meditation Robin Monroe: (Yoga biomedical trust, England 1989)
- Complementary and Alternative Medicine: Legal Boundaries and regulatory Perspectives by Michael H. Cohen (Paperback- Aug 19, 1997)

*Research papers on all concerned topics from peer reviewed journals.*

### **RESOURCE MATERIALS ON COMPLEMENTARY AND ALTERNATIVE MEDICINE INCLUDING YOGA**

#### **Journals**

- Journal of Association of Physicians of India (JAPI)
- British Medical Journal (BMJ)
- New England Journal of medicine
- The Lancet
- American Journal of Medicine
- Issues in Medical Ethics

- Indian Journal of Tuberculosis
- Dermatology Clinics
- GUT (Gastroenterology)
- Postgraduate Medical Journal
- Stroke Blood
- Neurological Clinic
- Indian journal of Nephrology
- Public Health Papers

### **Specific:**

- Indian Journal of physiology and pharmacology
- Indian Journal of Medical Research
- Indian journal of Medical Sciences
- Journal of Alternative and Complementary Medicine
- Advances in Mind-body medicine
- Perceptual and Motor skills
- Psychological reports

### **Database:-**

Cochrane Database of Systematic Reviews-CDSR. Collection of 'systematic reviews' summarizing the findings of completed meta-analyses of the evidence presented in their cited studies. Available via Ovid.

- Ovid
- MELINE
- ALTMEDIX

### **Books**

- ABC of complementary Medicine. By Catherine Zollman 2000, BMJ Books, London
- The Guide to Complementary and Alternatives Medicine on the Internet. By Lillian R.Brazin 2004, The Haworth Information press, NY
- Complementary and Alternative Veterinary Medicine Considered By David W Ramey & Bernard E Rollin 2004 Iowa State Press, Iowa Integrative medicine By Benjamin Kligler & Roberta Lee.2004. The McGraw Hill Companies
- The Scientific Basis of Integrative Medicine By Leonard A.Wisneski & Lucy Anderson. 2005 The CRC press. Boca Raton, FL, USA
- Alternative advisor: The complete guide to natural therapies and alternative treatments. Reference WB 890 A4663 1997
- Alternative health & Medicine encyclopedia. Reference WB 890 M378a 1998
- Alternative medicine- what works: A comprehensive, easy-to-read review of the scientific evidence pro & con. Reference WB 890 F958a 1997
- Complementary and alternative medicine in rehabilitation. 5th floor WB 890 L629 2003

- Complementary and alternative medicine secrets Reserve WB 18.2 C737 2002
- Fundamentals of Complementary and alternative medicine. 5th floor WB890 F981 2001
- Integrating complementary medicine into health systems. 5th floor WB890 16065 2001
- Integrative health care: Complementary and alternative therapies for the whole person. 5th floor WB890 S572i 2001
- Mosby's Complementary and alternative medicine , a research-based approach, 5th floor WB 890 F855m2004
- Practical dictionary of Chinese medicine. Reference W 13 W 814 p 2002
- Role of Complementary and alternative medicine; accommodating Pluralism, 5th floor WB 890 R45 2002
- Textbook of Complementary and alternative medicine. Reference WB 890 T355 2003

## **E-books**

Integrative medicine it provides the first definitive clinical reference, for the rapidly growing field of integrative medicine. Using a clinical, disease-oriented approach, Integrative medicine offers practical guidance for safely and effectively integrating complementary and alternative therapies in to regular primary care practice. It covers therapies such as botanicals, supplements, mind-body, life-style choices, nutrition, exercise, spirituality, and more.

Alternative Medicine Foundation. American alternative foundation inc. clearing house for CAM information and news, including the HerbMed database Contains resource guides for a variety of CAM modalities.

Alternative medicine Home page, University of Pittsburgh guide to CAM resource on the internet. Selected sites must meet the following criteria : 1. Are authorized body for the CAM system; 2. Provides quality information in an objective manner 3. Are resources for locating quality CAM literature and 4. Sites help individuals make informed decisions.

Alternative medicine health care Resources. McMaster university mega-directory of CAM internet sites.

New York Online Access to Health (NOAH) Alternative and Complementary medicine New York academy of medicine library information guide to CAM resources on the web; includes sections on different CAM modalities.

Cochrane collaboration complementary medicine field. University of Maryland school of medicine. Overview of the mission and activities of the Cochrane collaboration complementary medicine field includes links to die complementary medicine field newsletter, complementary medicine reviews & protocols, and the

Cochrane controlled trials Registry.

Educational Development for complementary and Alternative medicine (EDCAM) curriculum resources American Medical Student Association (AMSA) - included are topical descriptions, research summaries; References in books, journals, and Newsletters; audiovisual materials; web-sites with commentary; suggested reading lists; And reference to CAM course at other health professional programs. Holistic Kids Center for Holistic Pediatric Education and Research This web site provides information on diverse Complementary and Alternative Medicines, local practitioners practicing CAM in the Boston area, resources available to providers, and other useful tools for learning about CAM

Nutrition.gov. Clearinghouse for nutritional information put out by US government. Agencies; includes food facts and safety, health management and lifecycles issues.

### **Government [INTERNATIONAL-US BASED]**

- National Center for Complementary and Alternative medicine- NCCAM National Institutes of Health Supports rigorous research on CAM with a focus on research, training/career development, outreach, and integration of CAM practices in to conventional medicine Contains links to information on training, clinical trials, treatments, and alerts/advisories
- Bed Watch U.S. Food and Drug Association FDA medical product reporting program. Contains safely information and ways of reporting adverse effects of herbs, nutraceuticals, prescription and over-the counter medication
- MEDLINE plus. Alternative Medicine. Contains overviews and research articles on various CAM modalities, including; acupuncture, chiropractic, naturopathy and homeopathy.
- Nutrition gov. Clearinghouse for nutritional information put out by US government Agencies; includes food facts and safety, health management and lifecycles issues
- Office of Cancer Complementary and Alternative Medicine-OCCAM National Cancer Institute Coordinates the activities of the National Cancer Institute (NCI) in the arena of complementary and alternative medicine. Information on clinical trials funding opportunities, and general CAM is provided.
- Office of Dietary Supplements- ODS National Institute of Health Supports research and disseminates research in the area of dietary supplements. Also provides advice to other Federal agencies regarding research results related to dietary supplements. Responsible for the International Bibliographic Information on dietary Supplements (IBIDS) database
- Health finder US department of Health and Human Services Searchable guide to reliable consumer health information from the Federal Government.
- Food and Nutrition Information Center-FNIC. U.S Department of Agriculture Collects and disseminates information about food and human nutrition. Contains information on dietary supplements, food composition, and dietary guidelines.

## **COURSE CONTENTS - M.D. (ACUPUNCTURE & ENERGY MEDICINE)**

### **PAPER I**

#### **APPLIED BASIC MEDICAL SCIENCES AND CONCEPTS OF HEALTH & DISEASES IN ACUPUNCTURE & ENERGY MEDICINE**

##### **I. PHILOSOPHY AND PRACTICE OF ACUPUNCTURE & ENERGY MEDICINE.**

1. History and evolution of acupuncture.
2. Basis of acupuncture in India and acupuncture in other parts of the world.
3. Qi/Chi/Prana in various health sciences (subtle anatomy and physiology of energy)
4. Traditional and modern theories of acupuncture.
5. Meridians (outer and inner channels), collaterals, muscle meridians, extra meridians, extraordinary points.
6. Traditional and modern techniques of acupuncture and its precautions.
7. Etio-pathogenesis in acupuncture (exo and endogenic factors)
8. Diagnostics methods in acupuncture
9. Differentiation of syndromes and general principles of treatments.
10. Treatment of diseases (clinical, classical, single needle therapy)
11. Moxibustion
12. Auriculo acupuncture, face and scalp acupuncture
13. Sujok, acupressure, reflexology
14. Acupuncture anaesthesia
15. Cosmetic acupuncture
16. Instruments for diagnosis and treatment of acupuncture
17. Malpractices in Acupuncture.
18. Traditional Chinese medicine

##### **ENERGY SCIENCE RELEVANT TO ACUPUNCTURE**

- 1.Importance of integrated medicine for integrated health.
- 2.Energy sciences based on Pancha bhutas and Prana
- 3.Prana and energy system in Siddha, Ayurvedha and Unani
- 4.Energy sciences Vs energy medicine
- 5.Reflexology.
- 6.Yoga and acupuncture (asanas, Prayanama, mudra etc.,)
- 7.Acu-Varma and marma
- 8.Acu-Varma in emergency
- 9.Homeopathy & Acupuncture
- 10.Diet (basic and advanced)
- 11.Taste based food medicine & acupuncture.
- 12.Pharmaco-genetics and pharmaco-kinetics of herbs
- 13.Reiki and Pranic healing
- 14.Taiju (massage) and acupuncture
- 15.Qi-Qunge and Tai-Chi (energy exercise)
- 16.Martial arts and energy system.
- 17.Mind and Prana,
18. Body and mind balancing
- 19.Acupuncture psychology and yoga psychology.
- 20.Lifestyle and prana
- 21.Prayer healing
- 22.Medication to meditation
- 23.Adaptations of energy sciences in cultures and religions
- 24.Electro Magnetic waves & Magneto biology
- 25.Diagnostic methods of prana (modern and traditional energy scanning methods)
- 26.Instruments useful in diagnosis & treatments energy medicine
- 27.Acupuncture and pain management
- 28.Acupunture and natural delivery

### **III Applied basic medical science relevant to acupuncture & energy medicine.**

Applied anatomy, applied physiology and biochemistry related to advancement in understanding the physiological effects of natural therapies and establishing the physiological basis for symptamatology and diagnosis and chromo diagnosis. Microbiology and pathology relevant to the concepts of health and disease in **acupuncture & energy medicine** Clinical pharmacology\* - Introduction to principles of drug therapy; adverse reactions to drugs; physiology and pharmacology of the autonomic nervous system, nitric oxide and its' biologic and medical implications.\*This provides the required knowledge to handle patients who are on conventional medication s while offering acupunture treatments.

IV. Acupuncture and energy medicine according to siddha, Ayurveda, unani and homoeopathy.

## **PAPER II**

### **DIAGNOSIS USING CONVENTIONAL MEDICINE & ACUPUNCTURE DIAGNOSIS AND ACUPUNCTURE & ENERGY MEDICINE FOR THE DISORDERS**

#### **Cardiovascular system**

- Diagnosis and approach to the patient with heart disease-physical examination the cardiovascular system. Knowledge about conventional treatments.
- Disorders of the heart; normal and abnormal myocardial functions, heart failure congenital heart disease in the adult, rheumatic fever, vascular heart disease, Cardiac pulmonale; cardiomyopathies; myocarditis; Pericardial disease; Cardiac manifestations of systemic diseases
- Alteration in circulatory and respiratory functions:-Dyspnea, cough, approach the patient with a history of stable or unstable angina, approach to the patient with hypertension; cyanosis; edema; shock..
- Vascular disease; atherosclerosis; acute myocardial infarction; ischemic heart disease; hypertensive vascular disease; vascular disease of the extremities.
- Cardiac rehabilitation

#### **Respiratory system**

- Diagnosis and approach to the patient with disease of the respiratory system. Knowledge about conventional treatments.
- Disturbances of respiratory system; disturbances of respiratory functions.
- Disease of the respiratory system; bronchial asthma; chronic bronchitis.
- COPD; emphysema and airway obstruction; disorders of ventilation; sleep apnea; acute respiratory distress syndrome
- Disease of the respiratory system; bronchial asthma; chronic bronchitis;
- COPD; emphysema and airway obstruction; disorders of ventilation; sleep apnea; acute respiratory distress syndrome.
- Pulmonary rehabilitation



## **Kidney and urinary tract**

- *Alterations in Urinary functions and Electrolytes*; cardinal manifestations of the renal disease; voiding dysfunction, incontinence and bladder pain; fluid and electrolyte disturbances; acidosis and alkalosis.
- *Alterations In The Urogenital Tract*: impotence; disturbances of menstruation and other common gynecologic complaints in women.
- Approach to the patient with diseases of the kidney and urinary tract. Knowledge about conventional treatment. Disturbance of renal function, acute renal failure and chronic renal failure.

## **Gastrointestinal system**

- *Alterations in Gastrointestinal Functions*: dysphagia, nausea, vomiting and indigestion; diarrhea and constipation; gastrointestinal bleeding; jaundice-abdominal swelling; ascitis.
- Approach to the patient with gastrointestinal disease. Knowledge about conventional treatments
- Diseases of the esophagus; peptic ulcer and related disorders, disorders of absorption, IBS; ulcerative colitis and crohns disease
- Liver and biliary tract disease; approach to the patient with liver disease; evaluation of liver function; derangements of hepatic metabolism; bilirubin metabolism and hyperbilirubinemia; toxin and drug induced hepatitis; chronic hepatitis; cirrhosis and alcoholic liver disease infiltrative and metabolic disease affecting the liver; disease of the gallbladder and the bile ducts.
- Disorders of the pancreas – acute and chronic pancreatitis

## **Immune System, Connective Tissues and Joints**

- Hematological alteration – anemia; bleeding and thrombosis; enlargement , of lymph nodes and spleen
- Pain pathophysiology and management-chest discomfort and palpation – abdominal pain – headache – back and neck pain
- Approach to the patient with the disorder of immune system, connective tissue and joints. Knowledge about conventional treatment.
- Disorders of the immune system – introduction to immune system, major histocompatibility, primary immune deficiency disease; HIV disease; AIDS and related disorders; amyloidosis
- Disorder of immune mediated injury – disease of immediate type hypersensitivity; systemic lupus erythematosus; rheumatoid arthritis; dermatomyositis and polymyositis; Sjogren's syndrome, ankylosing spondylitis; undifferentiated spondyloarthropathy; behcet's syndrome; the vasculitis syndromes; sarcoidosis.
- Disorders of the joints – approach to articular and musculoskeletal disorders; osteoarthritis; arthritis due to deposition of calcium crystals, infectious arthritis psoriatic arthritis and arthritis associated with gastrointestinal diseases; relapsing polychondritis and other arthritides.

## **Endocrinology and metabolism**

- Alteration in body temperature: fever and hyperthermia; fever and hypothermia.
- Endocrinology – approach to the patient with endocrine and metabolic disorder knowledge about conventional treatments.
- Obesity, anorexia nervosa and bulimia nervosa; enteral and parenteral nutritional therapy; vitamin deficiency and excess-disturbance in trace elements
- Neuroendocrine regulation and diseases of the anterior pituitary and hypothalamus; diseases of the thyroid; diseases of the adrenal cortex pheochromocytoma; diabetes mellitus; hypoglycemia; disorders of the testis, ovary and female reproductive tract; endocrine disorders of the breast; disorders affecting multiple endocrine systems.
- Disorders of intermediary metabolism – disorders of the lipoprotein metabolism hemochromatosis; porphyrins; gout and other disorders of purine metabolism.
- Disorders of bone and mineral metabolism – calcium, phosphorous, bone metabolism; calcium regulating hormones; diseases of the parathyroid gland metabolic bone disease; disorders of phosphorous metabolism.

### **PAPER III**

### **DIAGNOSIS USING CONVENTIONAL MEDICINE & ACUPUNCTURE DIAGNOSIS AND ACUPUNCTURE & ENERGY MEDICINE FOR THE DISORDERS**

#### **Neurological disorders**

- Nervous system Dysfunction: faintness, syncope, dizziness, vertigo; weakness, abnormal movements and imbalance; episodic muscle spasms, cramps, weakness; numbness, tingling and sensory loss, acute confusional states; and other focal cerebral disorders; memory loss and dementia; disorders of sleep and circadian rhythms.
- Approach to the patients with Neurologic Disease. Knowledge about conventional treatments
- Electro-physiologic studies of the central and peripheral nervous systems; nerves imaging in neurological disorders
- Diseases of the Central Nervous System – migraine and cluster headache syndrome, seizures and epilepsy; Alzheimer’s disease and other prime dementias; parkinson’s disease and other extra pyramidal disorders; ata disorders; disorders of ANS; disorders of cranial nerves; diseases of spinal cord
- Disorders of The Nerves And Muscles – diseases of the peripheral nervous system; myasthenia gravis, muscular dystrophy and other diseases of neuromuscular junction; diseases of muscle
- Chronic fatigue syndrome
- Alcoholism and drug dependency – alcohol and alcoholism – opioid drug abuse and dependence
- Neurological rehabilitation

#### **Dermatological disorders**

- Alteration in the skin – approach to the patient with skin disorders
- Approach to the patient with dermatological diseases knowledge about conventional treatments
- Eczema; Psoriasis; Acne Vulgaris, allergic dermatitis; other common skin disorders; skin manifestation of internal disease.

#### **Psychiatric disorders**

- Approach to the patient with psychiatric disease. Knowledge about conventional

treatments.

- Anxiety neurosis; depression; obsessive compulsive disorders, manic depressive psychosis; bipolar disorders; mood disorders; personality disorder; psychosis.
- Psychiatric rehabilitation

### **Oncology**

- Approach to the patient with cancer. Knowledge about conventional treatments
- Psychosocial factors in the etiology and pathogenesis of cancer
- Benign and Malignant carcinomas, Knowledge about congenital diagnostic procedure, radiotherapy and chemotherapy
- Principles and practice of Integrative Oncology (i.e) use of congenital and natural management strategies and psychosocial care in oncology.
- Psychosocial rehabilitation

### **Obstetrics and Gynecology**

- Approach to the patient with Pregnancy. Knowledge about conventional care
- Anti – natal care; maintenance of normal pregnancy, child birth, post natal care
- Approach to the patient with Gynecological complains. Knowledge about conventional care
- Menstrual disturbance, Infertility, uterine diseases; ovarian diseases; pelvic tumors
- Family planning procedures.

### **Disorders of the Eyes, Ears, Nose and Throat**

- Approach to the patient with ENT disorder. Knowledge about conventional treatment
- Disorder of the Eye, disorders of nose, ear and throat.

## **PAPER 1V**

### **RESEARCH METHODOLOGY AND RECENT ADVANCES IN ACUPUNCTURE AND ENERGY MEDICINE**

#### **Research methodology**

Planning a research study; techniques for literature review including computational Database searches; study designs; assessment techniques, medical statistics; medical writing; project proposal preparation.

#### **Recent advances**

- Psycho neuro immunology [PNI] and Psycho neuro endocrinology – explaining the mind – body connection in disease and health
- Psychophysiology of biological rhythms , emotions , behavior and aging
- Stress and its impact on health and disease: Physiological mechanisms underlying ‘stress response’.
- Psychosomatics and psychosomatic medicine – role of human thinking, behavior and life style in the etiology, pathogenesis, clinical manifestations and management of

non-communicable life-style related diseases.

- Lifestyle and psychosocial behavior-health educational and natural medicine in prevention in high risk groups, effective management of chronic lifestyle related disease and minimization of subsequent medical complications
- Inherent healing capacities and natural therapies; concept of spontaneous regression, role of positive thinking, health behavior and natural therapies in spontaneous regression; clinical implications of natural therapies in eliciting inherent healing capacities.
- Natural and holistic medicine – integrating the physical, psychological, mental, social and spiritual needs of an individual in promotion of positive health, prevention of diseases and disabilities, management of diseases and overall improvement in ‘quality of life’.
- Advances in therapies used in Acupuncture and Energy medicine.
- Advances in medical & psychiatric rehabilitation.
- Integrative medicine.

#### **Reference book and other materials:**

- Research methods and statistics

#### **Research methods and statistics**

- 1)Research methods for therapists. Avril Rummond, Jo Campling, Nelson, Thornes, 1996
- 2)Complementary and Alternative Medicine: Legal Boundaries and Regulatory Perspectives by Michael H Cohen (paperback – Aug 19, 1997)
- 3)Regulation of functional foods and Nutraceutical L A Global Perspective (Institute of Food Technologist) by Clare Hasler (Hardcover – Mar 1,2005) – Illustrated
- 4)The Principles and Practice of Hydrotherapy: A guide to the Application of Water In Disease For Students and Practitioners of Medicine by Simon Barunch (paperback – Jul 9,2006)
- 5)Massage therapy career guide by Steve Capellini (paperback – Oct 12,1998)
- 6)Research papers on all concerned topics from peer reviewed journals

**\*The list of reference books shall be updated every year and submitted to the university for Approval by the institution executing the MD program.**

#### **REFERENCE BOOKS:**

#### **ACUPUNCTURE BOOKS:**

##### **•Felix mann books :**

- Reinventing acupuncture: a new concept of ancient medicine.
- Acupuncture : cure for many disease.

- Atlas of acupuncture.
- Meridians of acupuncture.
- Treatment of disease by acupuncture.
- Acupuncture : the ancient Chinese art of healing.
- Scientific aspects of acupuncture.

- Acupuncture 1 & 2 Dr.Fazlur Rahman
- Acupuncture – Anton Jayasurya
- Five spirits –Alchemical Acupuncture For Psychological And Spiritual Healing- Lorie Eve Dechar
- The Channels of Acupuncture. Clinical Use of the Secondary Channels and Eight Extraordinary Vessels BOOK-- [Maciocia Giovanni](#)
- Clinical Introduction to Medical Acupuncture By Steven K.H. Aung, William Pai-Dei Chen
  
- Single Point Acupuncture and Moxibustion for 100 Diseases--[Decheng Chen](#)
  
- Family Secret: One-needle Acupuncture -- S. Yanagiya
  
- Acupuncture & Moxibustion - A Clinical Desk Reference -- Cheng Xiaoming
  
- Management of Postoperative Pain with Acupuncture -- Peilin Sun
  
- The Systematic Classic of Acupuncture & Moxibustion -- Mi Huangfu
  
- Wrist-Ankle Acupuncture: Methods and Applications -- He Hun Lao, Moses Li
  
- Acupuncture and the Chakra Energy System: Treating the Cause of Disease -- John R. Cross
  
- Current Research in Acupuncture -- Ying Xia, Guanghong Ding, Gen-Cheng Wu
  
- Micro-Acupuncture in Practice --Yajuan Wang
  
- Medical Acupuncture in Pregnancy -- Ansgar Thomas Roeme
  
- The Lost Secrets of Ayurvedic Acupuncture: An Ayurvedic Guide to Acupuncture ---By Frank Ros
  
- Principles of Ear Acupuncture: Microsystem of the Auricle -- Axel Rubach
  
- Shonishin: Japanese Pediatric Acupuncture: Japanese Pediatric Acupuncture -- Stephen Birch
  
- Acupuncture Without Needles -- [J. V. Cerney](#)

- Acupuncture: An Anatomical Approach -- By Houchi Dung, Curtis P. Clogston, Joeming W. Dunn
- Sujok for everyone -- [Park Jae Woo](#)

### **YOGA BOOKS:**

1. Complete Book of Yoga: Karma Yoga, Bhakti Yoga, Raja Yoga, Jnana Yoga (Hardcover) by Swami Vivekananda, Vijay Goel, 2005
2. Hatha Yoga Pradipika - Bihar School of Yoga
3. The Upanishads by Eknath Easwaran, Nilgiri Press, 2007
4. Wisdom of the Vedas (Theosophical Heritage Classics) by J. C. Chatterji, Quest Books, 1992.
5. The science of yoga (A commentary on Patanjali's Yoga Sutras). By I.K. Taimini; the Theosophical publishing House, 2005.
6. The Bhagavad-Gita (Classics of Indian Spirituality) by Eknath Easwaran, Nilgiri Press; 2007
7. Vasistha'Yoga by Venkatesnanada (Author), State University of New York Press. 1993
8. Asana Pranayama Mudra Bandha by Swami Satyananda Saraswati, Bihar School of Yoga. 2000
9. Prana Pranayama Prana Vidya by Swami Niranjanananda Saraswati, Bihar School of Yoga, 2000
10. Yogic Nutrition by Gina L. Nick. LTP Publishing, 2005
11. Yoga for Health, Relaxation and Well-Being (Gotta Minute) by Nirvair Singh Khalsa, 2001
12. Meditation As Medicine: Activate the Power of Your Natural Healing Force (paperback) by Dharma Singh Khalsa, Simon & Schuster, 2002
13. Meditation: classic and contemporary perspectives by Deane H. Shapiro, Roger N. Walsh, Aldine Transaction, 1984
14. Mudra – Bihar School of Yoga
15. Yoga psychology- Bihar school of yoga

### **NATUROPATHY BOOKS:**

1. Principles of naturopathy combining Old and New: Naturopathy for 21st century by Robert S. Thiel Whitman publication, 2001
2. Vitality, Fasting and Nutrition: A Physiological study of the Curative power of Fasting, Together with a New Theory of the Relation of food to Human Vitality (Paperback) Hereward Carriqton. Kessinger publishing, 1996
3. Therapeutic Massage: A scientific Approach. Turchaninov R. Aesculapiu Books, 2000.
4. The Massage Connection: Anatomy and Physiology (Lww Massage Therapy & Bodywork Series) (Hardcover), Kalyani PremKumar.
5. Lippincott Williams & Wilkins; 2 Signed edition (August 1, 2003)
6. Hydrotherapy Theory & Technique [TEACHER'S EDITION] Pine Island Publisher's Inc.; 3rd edition (2003)
7. Rational Hydrotherapy J H Kellogg Indian Edition pub by NTN, Pune (2005)

8. B Massage Therapy J H Kellog pub (19)
9. Fasting can save your life Indian Ed Herbert M Shelton pub Prakrti Jivana Kendra, Bangalore
10. Toxemia Explained J H Tildon,
11. Hydrotherapy & Heliotherapy Natural Healing With Water. Herbs & Sunlight) Maureen O'Rourke Educating Hands Inc. 1995
12. Hydrotherapy Principles and Practice by Margaret Reid Campion Paperback
13. Technique of hydrotherapy and Swedish massage by George Knapp Abbott
14. Modern Hydrotherapy for the Massage Therapist by Mary Betts Sinclair
15. Hydrotherapy in Practice by Bridget C. Davis and Ronald A Harrison

### **SIDDHA REFERENCE BOOKS**

- Introduction to Siddha Medicine - T.V.Sambasivam Pillai
- Simple Home Remedies - D.I.M & H, Chennai.
- Siddha Pharmacopoeia - Dr.V.Narayanaswami, H.P.I.M. Editor
- History of Siddha Medicine - Thiru.N.Kandasamy Pillai
- Siddha Science of Longevity and Kalpa Medicine - Thiru.K.Shanmugavelan
- Siddha Toxicology - Vaidya Sironmani K.S.Murugesamudaliar
- Siddha Principles of Social and Preventive Medicine - Dr.G.Durairasan
- Tamil to English Dictionary of Medicine - Chemistry, Botany and Allied Science - T.V.Sambasivam Pillai

### **AYURVEDA REFERENCE BOOKS**

- Charaka Samhita
- Susruta Samhita

### **UNANI REFERENCE BOOKS**

1. Hand book on unani medicines with formulae ,process, and uses and analysis, By NIIR board of consultant and engineers

### **REIKI REFERENCE BOOKS**

1. Hawayo Takata's Story; Author: Helen J. Haberly
2. Practical reiki, By: alicelanholt
3. Reiki for Life: The Complete Guide to Reiki Practice for Levels 1, 2 & 3; By Penelope

4. Tails of a Healer, Animals, Reiki and Shamanism, By: Rose De Dan

5. REIKI- Comprehensive Guide, By: Pamela Miles

### **HOMEOPATHY REFERENCE BOOKS**

1. The Encyclopaedia of Pure Materia Medica (Timothy Field Allen)
2. New, Old and Forgotten Remedies (Edward Pollock Anshutz)
3. First Lessons in the Symptomatology of Leading Homöopathic Remedies (H.R. Arndt)
4. How to use the repertory (Glen Irving Bidwell)
5. Historic sketch of the monument erected in Washington City {B.F. Bittinger}
6. Homoeopathic Materia Medica (William Boericke)
7. Hahnemann and Paracelsus (John Henry Clarke)
8. Gunpowder as a War Remedy (John Henry Clarke)
9. The 13 Remedies of Dr. John Henry Clarke (Dr R. Séror)
10. The Genius of Homeopathy (Stuart M. Close)
11. Introductory Workbook in Homeopathy (Richard L. Crews)
12. Practice of Homoeopathy (Paul F. Curie)
13. Biographies (Valérie Dayraud)
14. American Homeopathy in the World War (Frederick M. Dearborn)
15. Key-Notes to the Materia Medica (Henry Newell Guernsey)
16. Organon (Samuel Hahnemann)
17. Bach -flower remedies

### **ENERGY MEDICINE REFERENCE BOOKS**

1. Accu varma & energy science medicine by Dr. Gunaneedhi
2. Unavu maruthuvam by: kandaswamymudaliar
3. Anatomy of the Spirit: The Seven Stages of Power and Healing (Paperback) ,by Caroline Myss (shelved 5 times as energy-medicine)
4. Hands Of Light (Paperback) ,by Barbara Ann Brennan (shelved 4 times as energy-medicine)
5. Dr. Judith Orloff's Guide to Intuitive Healing: 5 Steps to Physical, Emotional, and Sexual Wellness (Paperback) ,by Judith Orloff (shelved 2 times as energy-medicine)
6. The Subtle Body: An Encyclopedia of Your Energetic Anatomy (Paperback) ,by Cyndi Dale (shelved 2 times as energy-medicine)
7. Crystal Healing: Applying the Therapeutic Properties of Crystals and Stones (Paperback) ,by Katrina Raphaell (shelved 2 times as energy-medicine)
8. Energy Medicine: The Scientific Basis (Paperback),by James L. Oschman (shelved 2 times as energy-medicine)
9. Miracles Through Pranic Healing (Hardcover) ,by Master Choa Kok Sui (shelved 1 time as energy-medicine)
10. Positive Energy: 10 Extraordinary Prescriptions for Transforming Fatigue, Stress, and Fear into Vibrance, Strength, and Love (Paperback) ,by Judith Orloff (shelved 1 time as energy-medicine)
11. Theta Healing: Introducing an Extraordinary Energy Healing Modality (Paperback) ,by Vianna Stibal (shelved 1 time as energy-medicine)
12. Energy Healing: The Essentials of Self-Care (Paperback) ,by Ann Marie Chiasson (shelved 1 time as energy-medicine)
13. Reiki, the Healing Touch: Japanese Reiki Techniques and Hayashi Healing Guide



- (Paperback) ,by William Lee Rand (shelved 1 time as energy-medicine)
- 14.Frequency: The Power of Personal Vibration (Hardcover),by Penney Peirce (shelved 1 time as energy-medicine)
- 15.The American Indian Secrets of Crystal Healing (Paperback) ,by Luc Bourgault (shelved 1 time as energy-medicine)
- 16.Crystal Prescriptions: The A-Z Guide to Over 1,200 Symptoms and Their Healing Crystals (Paperback) ,by Judy Hal

### **Psychoneuro Immunology**

- 1.Neurologic Clinics –Freund
- 2.Psychoneuro Immunology –Robert Ader , David L. Felten
- 3.Psych Neuro Immunology – Jorge H. Daruna

### ***Anatomy/physiology/Biochemistry/Biostatics***

- Neuro anatomy by Inderbir singh
- Samson Wright’s Applied Physiology, Oxford University Press (India). 198
- Clinical Anatomy: A Revision and Applied Anatomy for Clinical. Students, Harold Ellis, Blackwell Publishing, 2006
- Applied Biochemistry of Clinical Disorder (Hardcover). Allan G. Gornall, Lippincott Williams & Wilkins, 1981.
- Clinical Handbook of psychological Disorders, Third Edition. A step-by-step Treatment Manual (Hardcover), David H. Barlow. The Guilford Press; 2001
- Essentials of Pathophysiology: Concepts of Altered Health States Car Mattson Porth, Lippincott Williams & Wilkins, 2006.
- Basic pharmacology (paperback). Perspective Press (Editor), Morton Publishing Company; 2000
- Clinical Neuroanatomy for medical students. 4th edition.
- Textbook of medical physiology, Guyton. 9th edition.
- Review of medical physiology, Ganong, 18th edition.
- Harper’s Biochemistry, 25th edition.
- Lippincott’s illustrated review – biochemistry, 2n edition.
- Methods in Biostatistics, B.K. Mahajan, 6th edition.

### ***Embryology***

- Human embryology – inderbir singh
- Longmans medical embryology

### ***Pharmacology/microbiology/pathology:***

- Textbook of pharmacology, Goodman and Gillmann’s.
- Washington manual of Medical Therapeutics, 29th edition.
- The Biochemical Basis Of Neuropharmacology –Jack R. Cooper,Hoyd E Bloom
- 

### ***Cardiology***

- 1)The clinically recognition of congenital heart diseases- Joseph K Perloff, edition

Jaypee

- 2)An introduction to electrocardiography—Leoschamroth, 7th edition black science
- 3)Practical Electrocardiography – Marriot, 9th edition Textbook of Cardiovascular Medicine – Eugene Braunwald, 5th edition.
- 4)The heart – hurst,9th edition
- 5)Congenital heart disease in adults-Perloff, 2nd edition. Cardiovascular at pulmonary physical therapy: an evidence- based approach by William DeTurk and Lawrence P Cahalin.
- 6)Complementary and alternative cardiovascular medicine: clinical Handbook(contemporary cardiology set) (contemporary cardiology) by Richard A. Stephen and Mehmet C Oz (hardcover-mar 5 . 2004)
- 7)Complementary and alternative cardiovascular medicine: clinical and book (contemporary cardiology set) (contemporary cardiology) by Richard A. Stein and Mehmet C Oz(hardcover-mar 5 . 2004)
- 8)The cardiovascular cure: how to strengthen your self defense against heart attack and stroke by John P Md Phd Cooke and Judith Zimmer (paperback- Aug 12, 2003)
- 9)Cardiovascular and pulmonary physical therapy : an evidence-based approach by William DeTurk and Lawrence p Cahalin (hardcover-mar 12 . 2004)
- 10)Integrative manual therapy for the connective tissue system Myofascial release by Sharon Giammatteo, jay kain , and Thomas Giammatteo (hardcover-Nov 10 . 2004)

### ***Respiratory Medicine/Critical Care Medicine***

- 1.Chest medicine essentials of pulmonary and critical medicine. Ronald I. George, 3rd edition (Williams and Wilkins)
- 2.Annual of Intensive Care Medicine, Irwin and Rippe, 3rd edition
- 3.Textbook of respiratory Diseases, Crofton and Douglas
- 4.A practical guide to pulmonary medicine, Goldstein
- 5.Interpretation of Pulmonary Function Tests, Hyatt, Scalan
- 6.Swasa Sanjeevani, Athma, Subramanyam G: (Vishalandra publishing house, Hyderabad 2000)

### ***Nephrology***

- 1)Textbook of renal disease, Judith, lowrence,2nd edition (Churchill Livingstone)
- 2)Diseases of Kidney, Schrier, 6th edition (Little Brown)
- 3)Manual Of nephrology

### ***Gastro – enterology***

- 1)current diagnosis biliary and treatment in gastroenterology
- 2)disease of the liver and system – s Sherlock, Dooley, 10th edition (Blackwell sciences0
- 3)gastrointestinal and liver diseases – mark Feldman, bruce scharschmidt 6th edition (Saunders)
- 4)Schiff's diseases of the liver - Schiff's , 8th edition
- 5)Healing digestive disorders natural treatment for gastrointestinal conditions by Andrew Gaeddert (paperback – Feb 25,2004)
- 6)Natural stomach care: treating and preventing digestive disorders with the best of eastern and western healing therapies by anil minocha (paperback – Aug 7,2003)
- 7)Hydrotherapy: simple treatment for common ailments by Clarence W. Dail and

Charles s. Thomas (paperback – sep 1989)

8)The Duke Encyclopedia of New Medicine: Conventional and Alternate Medicine for All Ages by; The Duke Center for Integrative Medicine, Rich Liebowitz. Linda Smith, and Tracy Gaudet (Hardcover – Nov 14,2006)

9)The American Physical Therapy Association Book of Body Maintenance Repair by Steve Vickery and Marilyn Moffat (paperback – April 15,1999)

10) Fasting and Eating for Health: A Medical Doctor's Program for Conquer Disease by Joel Fuhrman and Neal D .Barnard (paperback – April 15,1995)

### ***Immune System, Connective tissue and joints***

1.Healing Immune Disorder: Natural Defense – Building Solution by Anderson Gaeddert (paperback – Nov 8,2005)

### ***Rheumatology***

1.Rheumatology , John Klippel, 1994

#### Endocrinology

1)William's textbook of endocrinology, Wilson Fuster, 9th edition (W.B. Saund

2)User's Guide to Thyroid Disorders (Basic Health Publications User Guide) by Kathleen Barnes (paperback – Mar 2,2006)

**\*The list of reference books shall be updated every year and submitted to the university for Approval by the institution executing the MD program.**

### **Reference book and other materials:**

#### ***Neurology***

- principles of Neurology – Adam's, victor, 6th edition (McGraw Hill)
- Diseases of the brain – Ed Brain, John Walton, 10th edition (oxford univ)
- Neurological differential diagnosis – John Patten
- Evidence – Based Neurology: Management of Neurological Disorders (Evidence based Medicine) by Charles Warlow, Richard Hughes, Bernard Uitdehaag, a Alessandro Liberati (Hardcover – May 1,2007) – Illustrated
- Attention Deficit Hyperactivity Disorder (The Latest Assessment and Treatment Strategies) by C. Keith, Ph .D. Connors and Juliet L. Jett (Paperback 12,2003)
- Complementary and Alternative Medicine and Multiple Sclerosis by Allen C Bowling (Paperback – Nov 13,2006)

#### ***Dermatology***

- Healing skin Disorder: Natural Treatments for Dermatological conditions by Andrew Gaeddert (Paperback – Aug 12, 2003)

#### ***Psychiatry***

- Clinical Handbook of Psychological Disorders, Third Edition: A Step – by – Treatment Manual (Hardcover), David H Barlow, The Guilford Press; 2001
- The Physician Guide to Depression and Bipolar Disorders by Dwight L E and Dennis S Charney (Paperback – Nov 10.2005)
- Physical Therapy The Truth: For Students, Clinicians, and Health Professionals by Monie Phillips PT (Paperback – April II.2006)

### ***Geriatrics/ Gerontology***

- Geriatric Medicine, 3rd edition

### ***Oncology***

- Principles and practice of oncology, De Vita
- Clinical oncology (Books with CD-Rom for Windows & Macintosh) by Raymond E., Jr. Lenhard, Robert T. Osteen, and Ted Gansler (Hardcover – Nov 1,2000) – Illustrated
- An Introduction to Psycho – oncology by Patrice Guex (Paperback – Dec 22, 1993)
- Cancer Nursing: Principles And Practice (Jones and Bartlett series in Oncology) by Connie Henkc Yarbrow, Margaret Hansen Frogge, and Michelle Goodman (Hardcover – April 18,2005)
- Oxford Handbook of oncology (oxford Handbooks) by James Cassidy and D Bissett (Paperback – Jun 15,2002)
- Lecture Notes: Oncology (Lecture Notes) by Marki Bower and Jonathan Waxman (Paperback – Mar 1,2006) – Illustrated
- Herb – Drug Interactions in Oncology by Barrie R. Cassileth and Charles D Lucarelli (Paperback – Jul 1,2003)

### ***Neutraceuticals and natural herbs in health and disease***

- The American Pharmaceutical Association Practical Guide to Natural Medicines by Andrea Peirce (Hardcover – Mar 3, 1999)
- The Natural Medicine Guide to Bipolar Disorder (The Healthy Mind Guides) by Stephanie Marohn (Paperback – Mar 2003)
- The PMDD Phenomenon : Breakthrough Treatments for Premenstrual Dysphoric Disorder (PMDD) and extreme Premenstrual Syndrome by Diana L. Dell and Carol Svec (Paperback – Sep 25,2002)
- Bountiful, Beautiful, Blissful: Experience the Natural Power of Pregnancy and Birth with Kundalini Yoga and Meditation by Gurmkh Kaur Khalsa and Cindy Crawford (Paperback –Jun 1, 2004)

### ***Environmental and occupational health hazard***

- Environmental and occupational health hazard (Clinics in Laboratory Medicine, 4:3) by Robert V. Blanke (Hardcover – 1984)
- Illustrated Dictionary and resource Directory of Environmental and occupational health, Second Edition by Herman Koren (Hardcover – May 11,2004)
- occupational hazard and Human Health by Richard B. Philp (Hardcover – April 13,1995)
- Environmental and Industrial Health Hazards A Practical Guide by R.A Trevethick (Hardcover – Jun 1976)
- Agricultural medicine: occupational and environmental health in agriculture for the

health professions by Kelley j. Donham and Anders Thelin (Hard cover-may 1, 2006)-illustrated

•Energy medicine in therapeutics & human performance by James J. Oschman(paperback-Mar 8, 2003)

### ***Physical therapy***

•Handbook of pediatric physical therapy by Toby Long and Kathy Toscano (paperback- Sep 1,2001)

•Occupational Therapy: Practice Skills for Physical Dysfunction by Lorraine Williams Pedretti and Mary Beth Early (Hardcover – Jan 15,2001)

•Introduction to Physical Dysfunction by Michael A. Pagliarulo (paperback – Jul 31,2006)

•Occupational Therapy for Physical Dysfunction by Mary Vining Radomski and Catherine A Trombly (Hardcover – Mar 1,2007)

•Physical therapist Examination Review by Theresa Meyer (paperback – Nov 30,2001)

•Guide to Physical Therapist Practice by Apta and American Therapy Association (paperback – Jan 2001)

•Quick Reference to Physical Therapy by Julie A.Pauls and Kathlyn L Reed (paperback – Nov 2003)

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## **TEACHING AND LEARNING ACTIVITIES**

A Candidate pursuing the course should work in the institution as a full time student .No candidate should be permitted to run a clinical/laboratory/nursing home while studying PG. Teaching and learning activities: A list of teaching and learning activities designed to facilitate students to acquire essential knowledge and skills outlined are given below:

**1.Lectures:** are to be kept to a minimum. They may however be employed for teaching certain topics:

Didactic lectures: recommended for selected common topics for PG

Students of all specialties

Biostatistics

Use of library

Research methods

Medical code of conduct and medical ethics

National health and disease control programs

Communication skills

Integrated lectures: These are recommended to be taken by multidisciplinary teams for selected topics. e.g. jaundice, DM, thyroid, etc

**2.Journal club:** recommended to be held once a week.

All the PG students are expected to attend and actively participate in discussion and enter in the logbook relevant details. Further every candidate must make a presentation from the allotted journals, selected articles at least four times a year and a total of 12 seminar presentations in 3 years. The presentation would be evaluated using checklists and will carry the weight age for internal assessment (see checklist in section F). A timetable with names of the students and the moderator should be announced at the beginning of every year.

**3. Subject seminar:** Recommended to be held once a week all the PG students are expected to attend and actively participate in discussion and enter in the logbook relevant details. Further every candidate must present on selected topics at least four times a year and total of 12 seminar presentations in three year. The presentations would be evaluated using checklists and would carry weight age for internal assessment (see checklist in section F). A time table for the subject with names of the student and the moderator should be scheduled at the beginning of every year.

**4. Student symposium:** Recommended as an optimal multi disciplinary programme. The evaluation may be similar to that described for subject seminar.

**5. Ward rounds:** ward rounds may be service or teaching rounds

Service rounds: PG students and interns should do the rounds every day for the care of patients. Newly admitted patients should be worked up by the PGs and presented to the seniors the following day

Teaching rounds: Every unit should have grand rounds for teaching purpose. The students should maintain a dairy for day to day a entities of (3) and (4) should be made in the logbook

**6. Clinico-pathological conference:** Recommended once a month for all post graduate students. Presentation is done by rotation. If cases are not available due to lack of clinical programs, it could be supplemented by published CPCs.

**7. Inter Departmental Meeting:** strongly recommended particularly with departments of pathology and clinical departments at least once a week. PG students should attend these meetings and relevant entities must be made in the logbook

•Pathology: A dozen interesting cases may be chosen and presented by the PG students and discussed by them as well as the senior staff from the department of Natural Therapeutics and the visiting consultant in medicine. The staff of pathology department would then show the slides and present final diagnosis .In these sessions the advance immune histo chemical techniques, the burgeoning markers other recent developments can be discussed so that the candidate is trained to make appropriate observation and interpretation.

•Radio Diagnosis: Interesting cases and the imaging modalities should be discussed so that the candidate is trained to make appropriate observation and interpretation.

**1. Teaching Skills:** PG students must teach UG students by taking demonstration,

bedside clinics, tutorials, lectures etc., Assessment is made using a checklist by faculty as well students. Record of their participation be kept in logbook .Training of PG students in Education Science and Technology is recommended.

## **2.Continuing Medical Education Programs (CME):**

- Recommended that each student should attend at least 2 state level CME program in 3 years.
- Recommended that each student should take up a study for few weeks at any of the National level research institute like VYASA at Bangalore, KUNJALAYANANDA RESEARCH INSTITUTE at pune , BIHAR YOGA UNIVERSITY ect,
- They can also take over International visit on different specialty institution in overseas
- Guest faculties may be invited for different specialty periodically

## **1.Method of Training:**

- Emphasis is on hospital training with candidates given graded responsibilities in the management and the treatment of patient entrusted to them, while rotating in natural medicine units and of subspecialty units.PG students also attends respective unit's outpatient & inpatient activities and consultations.
- Didactic lecture and demonstration by basic and clinical departments to orient all new PG house staff to various departmental services and also introduce basic concept of acute care management of medical emergencies involving laboratory , radiology , blood bank services & orientation to medical records and library facilities. Lectures are organized over a period of two months and serve as introduction to all new PGs to promote the need for integrated approach between various disciplines.
- Beside clinics once a week involving 1 individual senior professor or specialist.
- Hospital conference once in a fortnight involving multidisciplinary approach , case selection to be done by senior faculty members to emphasize current diagnostic therapeutic advances,
- Journal club once a week. Three to four journals by PGs and junior faculty under supervision of senior faculty.
- Subject seminar once a week, topics to be selected carefully and should not be repeated unnecessarily within two years.
- Two to three cases will be discussed and moderated by senior faculty. Other consultants invited based on the need.
- Audio-video and power point presentations should be used for all the academic activities.
- Awareness and treatment camps on different specialty must be conducted especially at villages, once a month.

## **1.Dissertation work**

- Every candidate pursuing degree course is required to carry out work on as selected research project under the guidance of a recognized PG teacher. The results of such a work shall be submitted in the form of dissertation.
- The dissertation is aimed to train a PG student in research methods & techniques. It includes identification of a problem, formulation of a hypothesis, search & review, getting acquainted with recent advances, designing of a research study, collection of data, critical analysis and comparison of results and drawing conclusions.

- Every candidate shall submit to the register Tamilnadu Dr.MGR Medical University, in the prescribed work 6 months from the date of commencement of the course on or before the dates notified by the university. The synopsis shall be sent through the proper channel
- The dissertation should be written under the following heading:
  - ✓Introduction
  - ✓Aims or objective of study
  - ✓Review of literature
  - ✓Material & methods
  - ✓Results
  - ✓Discussions
  - ✓Conclusion
  - ✓Summary
  - ✓Limitations & Future directions
  - ✓References
  - ✓Tables
  - ✓Annexure
- The written text of dissertation shall not be less than 50 pages and shall not exceed 150 pages excluding references, questionnaires, tables and other annexure. It should be neatly typed in double line spacing on one side of paper. Spiral binding should be avoided. The guide HOD and head of the institution shall certify the dissertation.
- Case study with evidence based video documentation for 1000 cases must be completed in 3 years and submitted to the parental institution.
- Four copies of dissertations thus prepared shall be submitted to the register, 6 months before final examination on or before the dates notified by the university.
- Examiners appointed by the university shall value the dissertation approval of dissertation work is an essential precondition to appear in the university examinations.

## **1.ROTATION**

Details of rotation including ancillary postings year wise as follows:

### **•PG1 year**

The candidates shall be posted to department of Indian Medicine, acupuncture clinics & energy medicine clinics, and to the different departments of Natural Therapies at the parent teaching hospital. This would include lab duties, clinical duties and teaching assignment to under graduate students.

### **•PG2 year**

Apart from the clinical postings at the parent Naturopathy & Yoga Hospital, the candidates shall be posted to specialty departments at the conventional medical hospital. This is required to have an access to the large patient population and receive hands on experience related to the diagnosis, interpretation of tried diagnosis procedures, knowledge about the conventional treatment and discussions on using Natural therapies in the conventional treatment and discussion on using Natural therapies in the management. This would train the candidates to use this knowledge while treating patients at the parent Naturopathy & Yoga hospital. The specialty departments like,

- Cardiology
- Neurology
- Rheumatology & Immunology



- Endocrinology
- Pulmonary medicine
- Oncology
- Psychiatry

**•PG3 year**

During the third year , following of external postings the candidate is expected to handle the patients with comprehensive care along with the inputs from senior Naturopathy & Yoga physicians and visiting consultants at the parent Naturopathy & Yoga hospital Also the 1st year residence and interns in wards , handle emergency rooms & participate actively in teaching UG medical students and prepare himself for the role of consulting Naturopathy and Yoga in the mainstream medicine leading to the practice of evidenced based integrative medicine

The students are encouraged to attend local, state and national level conferences bodies etc. as part of CME program

**RESOURCES MATERIALS ON COMPLEMENTARY AND ALTERNATIVE MEDICINE**

**Journal**

- Journal of association of Physicians of India(JAPI)
- British Medical journal
- New England Journal Of Medicine
- The Lancet
- American Journal Of Medicine
- Issues in Medical ethics
- Indian Journal Of Tuberculosis
- Dermatology Clinics
- GUT(Gastroenterology)
- Postgraduate Medical Journal
- Stroke
- Blood
- Neurologic clinic
- Indian journal of nephropathy
- Public health papers

**Specific :**

- Indian journal of physiology
- Indian journal of medical Research
- Indian journal of medical Sciences
- Journal of Alternative and Complementary Medicine
- Advances in mind body Medicine
- Perceptual & motor skills
- Psychological reports

**Databases:**

Cochrane Database of systematic Reviews CDSR. Collection of systematic

reviews summarizing the finding of completed meta analyses of the evidence presented in their cited studies. Available via Ovid

Ovid MEDLINE

ALTMEDEX

### **Books :**

- 1.ABC of complementary medicine by Catherine zollman 2000, BMJ B. London
- 2.The guide to complementary & Alternative medicine on the internet by Lillian R.Brazin 2004, The Haworth information press,NY
- 3.Complementary & Alternative veterinary medicine considered by David W Ramey & Bernard E Rollin .2004 Iowa state press , Iowa
- 4.Integrative medicine By Benjamin Kligler & Roberto Lee.2004. The McGraw Hill companies
- 5.The scientific basis of integrative medicine. By Leonard A.wisneski & Lucy Anderson .2005. the CRC press. Boca Raton , FL,USA
- 6.Alternative advisor : the complete guide to natural therapies & alternative treatments . reference WB 890C7365 2003
- 7.Alternative health & medicine encyclopedia. Reference WB 890 M378a 1998
- 8.Alternative medicine reference WB890 F958a 1997
- 9.Alternative and Complementary medicine Desk WB890 C7365 2003
- 10.Alternative and Complementary medicine in rehabilitation WB890L629 2003
- 11.Alternative and Complementary medicine secrets WB 18.2 C737 2002
- 12.Fundamentals of Alternative and Complementary medicine 5th floor WB 890 F981 2001
- 13.Integrating Complementary medicine into health systems.5th floor WB890 16065 2001
- 14.Integrative health care Alternative and Complementary therapies for whole person WB 890 S572i 2001
- 15.Mosby's Alternative and Complementary medicine 5th floor WB 890 F855m 2004
- 16.Practical dictionary of Chinese medicine reference W13 W 81 4p 2002
- 17.Role of Alternative and Complementary medicine 5th floor WB890 R745 2002
- 18.Textbook of Alternative and Complementary medicine WB 890 T355 2003

### **E-books**

- Integrative medicine it provides the first definitive clinical reference for the rapidly growing field of integrative medicine. using a clinical disease oriented approach ,practical guidance for safely and effectively integrating complementary and alternative therapies in regular primary care practice
- American alternative foundation inc. clearing house for CAM information and news including the HerbMed database.
- Alternative medicine Home page, University of Pittsburgh guide to CAM resource on the internet selected sites must meet the following criteria : 1. Are authorized body for the CAM system; 2. Provides quality information in an objective manner 3.resources for locating quality CAM literature and 4. Sites help individuals make informed decisions
- Alternative medicine health care resources . McMaster university mege directory of

## CAM internet sites

- Newyork Online Access to Health(NOAH) Alternative and Complementary medicine new York academy of medicine library information guide to CAM resources on the web
- Cochrane collaboration complementary medicine field university of Maryland school of medicine overview of the mission and activities of Cochrane collaboration complementary medicine field includes links to the complementary medicine field newsletter, complementary medicine reviews & protocols and the Cochrane controlled trials registry
- Educational Development for complementary and Alternative medicine (EDCAM) curriculum resources American Medical Student Association (AMSA)included are topical descriptions , research summaries; References in books, journals, and Newsletters; audiovisual materials, web-sites with commentary; suggested reading lists; And reference to CAM course at other health professional programs.
- Holistic Kids Center for Holistic Pediatric Education and Research This web site provides information on diverse Complementary and Alternative Medicines, local practitioners practicing CAM in the Boston area, resources available to providers, and other useful tools for learning about CAM
- [Nutrition.gov](http://www.nutrition.gov). Clearinghouse for nutritional information put out by US government Agencies; includes food facts and safety, health management and lifecycles issues

## **Government [INTERNATIONAL-US BASED]**

- National Center for Complementary and Alternative medicine- NCCAM National Institutes of Health Supports rigorous research on CAM with a focus on research , training/career development, outreach, and integration of CAM practices in to conventional medicine Contains links to information on training, clinical trials, treatments, and alerts/advisories
- Bad Watch U.S. Food and Drug Association FDA medical product reporting program. Contains safety information and ways of reporting adverse effects of herbs, nutraceuticals, prescription and over-the counter medication
- MEDLINE plus. Alternative Medicine. Contains overviews and research articles on various CAM modalities, including; acupuncture, chiropractic, naturopathy and homeopathy.
- Nutrition gov. Clearinghouse for nutritional information put out by US government Agencies; includes food facts and safety, health management and lifecycles issues
- Office of Cancer Complementary and Alternative Medicine-OCCAM National Cancer Institute Coordinates the activities of the National Cancer Institute (NCI) in the arena of complementary and alternative medicine. Information on clinical trials funding opportunities, and general CAM is provided.
- Office of Dietary Supplements- ODS National Institute of Health Supports research and disseminates research in the area of dietary supplements. Also provides advice to other Federal agencies regarding research results related to dietary supplements. Responsible for the International Bibliographic Information on dietary Supplements (IBIDS) database
- Health finder US department of Health and Human Services Searchable guide to reliable consumer health information from the Federal Government.
- Food and Nutrition Information Center-FNIC. U.S Department of Agriculture Collects and disseminates information about food and human nutrition. Contains information on dietary supplements, food composition, and dietary guidelines.

## **MONITORING LEARNING PROGRESS**

It is essential to monitor the learning progress of each candidate through continuous appraisal and regular assessment. It not only helps teachers to evaluate students but also students to evaluate themselves. The monitoring is 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 checklist that assess various aspects. Checklists are given in Section F.

### **The learning outcomes to be assessed should include:**

- Personal attitudes
- Acquisition of knowledge
- Clinical and operative skills
- Teaching skills
- Dissertation

### **Personal attitudes- the essential items are:**

- Caring attitudes
- Initiative
- Organizational ability
- Potential to cope with stressful situations and undertake responsibility
- Trustworthiness and reliability
- To understand and communicate intelligibly with patients and others
- To behave in a manner, this 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

**Acquisition of knowledge:** The methods used comprise of "logbook" 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 supervisor should periodically validate the logbook. Sortie 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-1, section f)

•*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 a audio-visual aids are to be assessed using a checklist.

•*Clinic-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 analytic approach. The presenters are to be assessed using a checklist similar

to that used for seminars.

- *Medical audit* periodic morbidity and mortality meeting to be held. Attendance and participation in these must be insisted upon. This may not be included in assessment.

- *Clinical Skills. Day to day work:* skills in outpatients and ward work should be assessed periodically. The assessment should include the candidate's sincerity and punctuality, analytical ability and communication skills (see Model checklist 3, Section F)

- *Clinical meetings:* candidates should periodically present cases to his peers and faculty members. This should be assessed using a checklist (see Model checklist 4, Section F)

- *Clinical and procedural skills:* the candidate should be given graded responsibilities to enable learning by apprenticeship. The guide by direct observation assesses the performance. The student in the logbook records particulars (see table no.3, Section F)

- *Teaching skills:* candidates should be encouraged to teach UG medical students and paramedical students if any. This performance should be based on assessment by faculty members of the department and from feedback from the UG students (see model checklist 5, Section F)

- *Dissertation in the department:* periodic presentations are to be made in the department. Initially the topic selected is to be presented before submission to the University for Registration again before finalization for critical evaluation and another before final submission of the completed work (see model checklist 6 and 7, Section F)

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

- *Work diary/log book:* every candidate shall maintain a work diary and record his or her participation in the training programs conducted by the departments such as journal reviews, seminars, etc. the candidate as well as may make special mention of the presentations clinical or laboratory procedures if any conducted by the candidate.

- *Records:* records, logbooks and marks obtained in tests will be maintained by HOD and will be made available to the university.

## **Logbook**

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 logbook. Collectively logbooks are a tool for the evaluation of the training program of the institution by the external agencies.

The record includes academic activities as well as the presentations and procedures carried out by the candidate. A format for the logbook for the different activities is given in tables 1 and 2 of Section F.

Every student must maintain a record book (diary/logbook) and the work carried out by him and the training program undergone by him during the training, including details of a rotations, night calls, procedure and consultations done as M.D. candidates. These record books should be checked and assessed by faculty members imparting the training and certified by the HOD.

PG student's diary should include the following activities.

Format for PG diary (LOGBOOK)

- Cases seen on rounds – description of interesting cases and other miscellaneous topics discussed.
- Outpatient cases seen and details of interesting cases with follow up
- Procedures done on inpatients and outpatients and consultations done.
- UG teaching done during the day with details.
- PG training programs attended – details of bedside clinics, basic sciences, subject and clinical seminars, journal clubs, and hospital conference.
- Night duties – details of patients managed and emergencies, consultations. Ward calls attended.
- Details of study with topics covered during off hours in library/home Periodicals and journals reviewed with notes on interesting articles.
- Medical meetings, seminars, local professional meetings or other interesting CME, seminars attended.
- Diary should be reviewed on weekly basis by unit faculty and certified on monthly basis for PG's benefit at the end of each specialty rotation. Faculty should comment regarding absences and irregularities and make appropriate comments and suggest remedial measure for problematic prodigies.
- Satisfactory progress and 85% attendance mandatory before student allowed appearing for university examination.
- Size of notebook: 15cm×21cm with 200 pages. All notebooks should have a seal of college and HOD's approval: Extra notebooks utilized as and when necessary. Diaries should be presented at the time of university clinical exam for review by examiners as per university regulations.

## **INTERNAL EVALUATION OF P.G. STUDENTS PERFORMING DURING THREE YEARS**

### **1 year of M.D. students**

Assessment of the students with multiple choice questions, multiple short notes covering wide range of topics and practical examination with attention to history taking, Symptomatology, clinical skills, relevant diagnosis and therapeutic plans ascertained. Suggested time of evaluation is after six months and at the end of 1st year.

### **II year of MD Students**

Students should be evaluated at the end of cardiology , neurology & Rheumatology & Immunology postings with theory and practical examination by concerned specialties along with one faculty from Natural medicine and make appropriate recommendation to meet minimal satisfactory guidelines expected of 2nd year PG students . Other specialties with MCQ format and viva regarding candidates , comprehension of the subject.

### **III year of MD students**

PG should be evaluated at the beginning of his / her 3rd year training by panel of senior PG teachers. Suggested pattern of assessment with two essay type theory

papers and multiple choice questions , clinical skills , diagnostic and therapeutic skills evaluated intermittently by unit faculties . Mock examination suggested three to four months prior to final university exam should consists of two question papers each 3hours duration , one MCQ with 200 questions & viva voce similar to university examination under the supervision of senior faculty Results of all evaluations should be entered into PGs diary and departmental file for documentation purpose . Main purpose of periodic examination and accountability is to ensure clinical expertise of students with practical and communication skills and balance broader concept of diagnostic and therapeutic challenges.

**Procedure for defaulters :** Every department should have a committee to review such situations. The guide and HOD counsel the defaulting candidate. In extreme cases of default the departmental committee may recommend that defaulting candidate be withheld from appearing from the examination if he / she fails to fulfill the requirement in spite of being given adequate changes to set himself or herself right. SCHEME OF EXAMINATION.

**Format of model check lists**

**Check list 1**

**Model check list for evaluation of journal review presentations**

**Name of student:**

**Name of the faculty:**

**Date:**

SI No	Items for observation during presentation	Po or 0	Below Average 1	Average 2	Good 3	Very Good 4	
	Article chosen was						
	Extent of understanding of scope & objectives of the paper by the candidate						
	Whether cross references have been consulted						
	Whether other relevant publications consulted						
	Ability to respond to questions on the paper / subject						
	Audio visual aids used						
	Ability to defend the paper						
	Clarity of presentation						
	Any other observation						
	Total score						

**Check list 2**

**Model checklist for evaluation of seminar presentation**

**Name of the student:**

**Name of the faculty:**

**Date:**

SI. 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 presentation						
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 checklist 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:

S I. N o	Points to be considered	Poor 0	Below average 1	Average 2	Good 3	Very Good 4
1.	Regularities 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 patients relatives for blood donation or postmortem and case follow up					
10	Overall quality of ward work					
	Total score					

### Check list 4

#### Evaluation form for clinical presentation

Name of the student:

Name of the faculty:

Date:

SI. No	Points to be considered	Poor 0	Below Average 1	Average 2	Good 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					
11.	Ability to react to questioning whether it follows logically from history and findings					
12.	Ability to defend diagnosis					
13.	Ability to justify differential diagnosis					
14.	Others					
	Grand total					

### Check list 5

#### Model checklist for evaluation of teaching skill practice

SI. No		Strong Point	Weak Point
1.	Communication of the purpose of talk		
2.	Evokes audience interest in the subject		
3.	The introduction		
4.	The sequences 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		
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**Check list 6**

**Model checklist for dissertation presentation**

Name of the student:

Name of the faculty:

Date:

SI · N o	Points to be considered	Poor 0	Below Average 1	Average 2	Good 3	Very good 4
1.	Interest shown in selecting a topic					
2.	Appropriate review of literature					
3	Discussion with guide & other faculty					
4.	Quality of protocol					
5.	Preparation of proforma					
	Total score					

**Check list 7**

**Continuous evaluation of dissertation work by guide/ co-guide**

Name of the student:

Name of the faculty:

Date:

S I · N o	Points to be considered	Poor 0	Below Average 1	Average 2	Good 3	Very Good 4
1	Periodic consultation with guide/ co-guide					
2	Regular collection of case material					
3	Depth of analysis/discussion					
4	Departmental presentation of findings					
5	Quality of final output					
6	Others					
	Total score					



## Model Overall Assessment Sheet

Name of the College:

Academic year:

Date	Faculty member & Others	Name of the student and mean score									
		A	B	C	D	E	F	G	H	J	
1.											
2.											
3.											
4.											
5.											
Total score											

## 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 (1), General objective (2), stated in section B and develop human values it is urged that effective 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 presentation, bedside rounds and academic postgraduate programs.

### Course contents

#### ➤ 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.

#### ➤ Definition of medical Ethics

- Difference of medical Ethics and bio-ethics
- Major principles of medical ethics

Beneficence	=	Fraternity
Justice	=	Equality
Self determination (autonomy)	=	Liberty

#### ➤ Perspective of medical Ethics

- The Hippocratic oath
- The declaration of Helsinki

- The WHO declaration of Geneva
- International code of medical ethics (1993)

➤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 behavior modification
- The physician-patient relationship
- Organ donation