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Programme outcomes

At the end of the training, a student will

- Functionally diagnose the patient & provide comprehensive holistic physiotherapy treatment to the needy.
- Justify the use of a specific therapeutic modality 7 be competent enough to apply it effectively.
- Contribute effectively as a rehabilitation team member for acute and chronic illness as & when required.
- Communicate effectively with the patient regarding the various aspects of disease as sought by patient or caretakers.
- Undertake research project for updation of personal knowledge as well as professional growth.
- Refer the patient to concerned healthcare professional in case if the need arises.
- Extend services in the community for underprivileged population who cannot report to the physiotherapy center.

Programme Specific Outcomes

At the end of the training period, a student should:

Musculoskeletal Sciences:

- Determine the physical therapy needs of any patient or client through examination and evaluation.
- Develop and implement the physical therapy plan of action designed to: maintain and restore strength, endurance, co-ordination and range of motion to improve or restore function, promote healing, relieve pain.
- Communicate appropriately and effectively with patients and families, colleagues, and the public.
- Apply the basic educational concept of teaching within the clinical practice of musculoskeletal physiotherapy.
- Apply sound administrative principles to the management of physical therapy practice.
- Organize and provide for continuing physiotherapy education programs for musculoskeletal physiotherapist.

Cardio-vascular and Respiratory Sciences:

- Focus on health as influenced by lifestyle and environmental factors.
- Emphasize on early identification, prevention and correction of risk factors responsible for development of cardio-vascular and respiratory disorders.
- Provide physiotherapy facilities for rehabilitation of patients admitted to intensive care units and those suffering from chronic cardio-vascular respiratory disorders.
- Evaluate and determine the functional status of lungs by means of spirometry.
- Teach long-term self-management strategies to persons suffering from chronic cardio-respiratory disorders.
- Assess the level of physical fitness of individuals by evaluation of health-related variables of fitness.
- Assist in enhancing physical fitness levels by providing individualized exercise programs that will improve their quality of life.

Community Medical Sciences:

- Focus on health as influenced by social and community structure.
- Emphasize on identifying, evaluating and discouraging health-damaging and facilitating health-promoting behaviors.
- Provide Physiotherapy facilities for those who are away from the health institutions and having difficulty in healthcare access.
- Provide Physiotherapy facilities Aid and appliances to disabled people living in urban/rural areas and ensure that they can access these facilities.
- Evaluate disability and plan for prevention and rehabilitation in rural and urban set up.
- Enable some of the persons with disability to become self reliant and contribute to family and society.
- Teach persons with disabilities and their families about basic care and hygiene.
- Assess the prevalence and incidence of various conditions responsible for increasing morbidity in the specific community.

Neurophysiotherapy:

- Provide quality education in terms of requisite knowledge and psychomotor skills needed to assess and treat patients with neurological dysfunction.
- Enable students to treat patients with neurological dysfunction in the most effective way leading to nearest possible independent functional life.
- Supplement education with much needed training in developing affective skill, including paediatric as well as geriatric age group.
- Provide quality care to patients suffering from neurological dysfunction considering long duration and residual disability associated with it.
- Deliver the custom made treatment plan for the maximal possible recovery leaving very minimal residual disability.
- Provide quality health care to underprivileged population by extending our services into the community.
- Foster research culture which is the base of evidence for appropriate treatment protocols.

- Encourage students to be part of research culture to carry forward the change occurring as a result of research.
- Generate sufficient grants for the conduct of variety of projects which will act as a stimulus to provide sufficient momentum during long term projects.

Course outcomes

I B.P.Th.

HUMAN ANATOMY

1] MUSCULOSKELETAL ANATOMY

The student will

i. identify & describe Anatomical aspects of muscles, bones, joints, their attachments & to understand and analyze movements.
ii. Apply of knowledge of anatomy on the living (living anatomy).
iii. understand the Anatomical basis of various clinical conditions.

2] NEURO ANATOMY

i. identify & describe various parts of nervous system.
ii. describe blood circulation of C.N.S. & spinal cord.
iii. identify the Structures of various C.N.S Trans-sections.
iv. identify and describe the course of peripheral nerves.
v. To understand anatomical basis of clinical conditions of nervous system.

3] CARDIOVASCULAR & RESPIRATORY ANATOMY

i. identify & describe various structures of the Cardio Vascular &Respiratory system and the course of blood vessels
ii. Identify and describe various structures of Thoracic cage and mechanisms of Respiration
iii. apply knowledge of Living anatomy with respect to Cardio Vascular &Respiratory system.
iv. understand anatomical basis of clinical conditions of cardiovascular &Respiratory system

4] Obtain Knowledge of **OTHER SYSTEMS & SENSORY ORGANS**

HUMAN PHYSIOLOGY

OBJECTIVES:

At the end of the course, the candidate will:

1. Acquire the knowledge of the relative contribution of each organ system in maintenance of the Milieu Interior (Homeostasis).
2. describe physiological functions of various systems, with special reference to

   Musculo-skeletal, Neuro-motor, Cardio-respiratory, Endocrine, Uro-genital function, & alterations in function with aging.
3. Analyze physiological response & adaptation to environmental stresses-with special emphasis on physical activity, altitude, temperature.
4. Acquire the skill of basic clinical examination, with special emphasis to Peripheral & Central Nervous system, Cardiovascular & Respiratory system, & Exercise tolerance / Ergography

BIOCHEMISTRY

OBJECTIVES:

The student would know:

1. Various biomolecules which are present in the body and functions
2. The formation and fate of these biomolecules
3. Their normal levels in body fluids required for functioning and their abnormal levels to understand the disease process.

FUNDAMENTALS OF KINESIOLOGY & KINESIOTHERAPY

OBJECTIVE:

Cognitive:
At the end of the course, the candidate will:

a) Define the various terms used in relation to Mechanics, Biomechanics & Kinesiology
b) Recall the basic principles of Biophysics related to mechanics of movement / motion & understand the application of these principles to the simple equipment designs along with their efficacy in Therapeutic Gymnasium & various starting positions used in therapeutics.

Psychomotor:
At the end of the course, the candidate will:

a) Describe & also acquire the skills of use of various tools of the Therapeutic Gymnasium
b) Demonstrate the movements in terms of various anatomical planes and axes.
c) Demonstrate various starting & derived positions used in therapeutics.
d) Describe physiological principles & acquire the skills of application of therapeutic massage
e) Acquire the skills of assessment of basic evaluation like sensations, reflexes &vital parameters
f) Acquire the skill of objective assessment of Range of Motion of the joints by Goniometry
g) Describe physiological basis and principle of relaxation and acquire the skills of relaxation methods
h) Describe physiological responses and principles of aerobic exercises for general
fitness & demonstrate fitness skills on self & group.

i) Describe physiological principles and acquire the skill of performing Pranayama &Yogasanas

FUNDAMENTALS OF ELECTROTHERAPY

OBJECTIVES:

Cognitive:
At the end of the course, the candidate will:

a) Recall the physics principles & Laws of Electricity, Electro magnetic spectrum, & ultra sound

b) Describe effects of environmental & man made electromagnetic field at the cellular level & risk factors on prolonged exposure.

c) Describe the Main electrical supply, Electric shock, precautions

Enumerate Types & Production of various Therapeutic electrical currents & describe the panel diagrams of the machines

Psychomotor:
At the end of the course the candidate will be able to –

a) Test the working of the various electrotherapeutic equipments

b) Describe in brief, certain common electrical components such as transistors, valves, capacitors, transformers etc& the simple instruments used to test / calibrate these components [such as potentiometer, oscilloscope , multimeter] of the circuit ; & will be able to identify such components.

c) Describe & identify various types of electrodes used in therapeutics, describe electrical skin resistance & significance of various media used to reduce skin resistance.

d) Acquire knowledge of various superficial thermal agents such as Paraffin wax bath, Cryotherapy, Hydrocollator packs, Home remedies, their physiological & therapeutic effects, Merits / demerits & acquire the skill of application.

PATHOLOGY

OBJECTIVES:

At the end of the course, the candidate:

Cognitive:

a) Will have sound knowledge of concepts of cell injury & changes produced by different tissues, organs and capacity of the body in healing process.

b) Acquire the knowledge of general concepts of neoplasia with reference to the Etiology, gross & microscopic features, & diagnosis, in different tissues, & organs of the body.

c) Acquire knowledge of common immunological disorders & their resultant effects on the human body.

Psychomotor:

a) Recall the Etiology–pathogenesis, the pathological effects & the clinico–pathological correlation of common infections & non-infectious diseases.

b) Understand in brief, about the common Haematological disorders & investigations necessary to diagnose them.

c) Correlate normal & altered morphology of different organ systems in different diseases needed for understanding disease process & their clinical significance

MICROBIOLOGY

OBJECTIVES:

At the end of the course, the candidate will

1. Have sound knowledge of prevalent communicable diseases and the agents responsible for causing clinical infections, pertaining to C.N.S, C.V.S, Musculoskeletal system, Respiratory system, Genitourinary system, wound infections and of newer emerging pathogens

2. Know the importance and practices of best methods to prevent the development of infections in self and patients (universal safety precautions)

PHARMACOLOGY

OBJECTIVES:

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

Cognitive:

a. Describe Pharmacological effects of commonly used drugs by patients referred for Physiotherapy; list their adverse reactions, precautions, contraindications, formulation & route of administration.

b. Identify whether the pharmacological effect of the drug interferes with the Therapeutic response of Physiotherapy & vice versa

c. Indicate the use of analgesics & anti-inflammatory agents with movement disorders with consideration of cost, efficiency, & safety for individual needs.

Psychomotor:

Get the awareness of other essential & commonly used drugs by patients- The bases for their use & common as well as serious adverse reactions.

PSYCHIATRY (INCLUDING PSYCHOLOGY)

OBJECTIVES:

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

Cognitive:

a. Define the term Psychology & its importance in the Health delivery system, & will gain knowledge of Psychological maturation during human development & growth & alterations during aging process.

b. Understand the importance of psychological status of the person in health & disease; environmental & emotional influence on the mind & personality.

c. Have the knowledge and skills required for good interpersonal communication.

Psychomotor:

a. Enumerate various Psychiatric disorders with special emphasis to movement / Pain & ADLs

b. Acquire the knowledge in brief, about the pathological & etiological factors, signs / symptoms & management of various Psychiatric conditions.

c. Understand the patient more empathetically.

KINESIOLOGY

Objective

– At the end of the course, the candidate will be able to–

1. Understand the principles of Biomechanics.
2. Acquire the knowledge of kinetics and kinematics of Spine, Extremities, Temporo-Mandibular joint, Thoracic cage
3. Acquire the knowledge of Musculo skeletal movements during normal Gait and Activities of Daily Living

KINESIOTHERAPY

OBJECTIVES:

At the end of the course, the candidate will be able to

Cognitive:

Describe the Biophysical properties of connective tissue, & effect of mechanical loading, & factors which influence the muscle strength, & mobility of articular &periarticular soft tissues.

Psychomotor:

1. Apply the biomechanical principles for the efficacy in the assessment methods for mobility, muscle strength
2. Acquire the skill of subjective and objective assessment of individual & group muscle strength
3. Acquire the skills of subjective and objective methods of muscle strengthening
4. Describe the physiological effects, therapeutic uses, merits / demerits of various exercise modes including Hydrotherapy
5. Demonstrate various therapeutic exercises on self;& acquire the skill of application on models with Home Programs
6. Analyze normal Human Posture [static & dynamic].
7. Acquire the skill of functional re-education techniques on models
8. Acquire the skill of Balance and Coordination Exercises
9. Acquire the skill of using various walking aids for Gait Training
10. Acquire the skill of demonstrating breathing exercises and retraining on self and others
11. Acquire the skill of demonstrating Postural Drainage on models

III B. P.Th.

PROFESSIONAL PRACTICE AND ETHICS

OBJECTIVES: At the end of the course the student will be compliant in following domains:

1. **Cognitive**:

a) Be able to understand the moral values and meaning of ethics.

b) Will acquire bedside manners and communication skills in relation with patients, peers, seniors and other professionals.

2. **Psychomotor**:

a) Be able to develop psychomotor skills for physiotherapist-patient relationship.

b) Skill to evaluate and make decision for plan of management based on sociocultutural values and referral practice.

3. **Affective**:

a) Be able to develop behavioral skills and humanitarian approach while communicating with patients, relatives, society at large and co-professionals.

b) Be able to develop bed side behavior, respect & maintain patients‟ confidentiality

SURGERY-I

(General Surgery, Cardiovascular & Thoracic Surgery & Plastic/ Reconstructive Surgery)

OBJECTIVES:

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

1. Describe the effects of surgical trauma & Anaesthesia in general

2. Clinically evaluate & describe the surgical management in brief of a) General Surgery

b) Neuro Surgery

c) Cardiovascular and Thoracic Surgery

d) ENT &Ophthalmic Surgery

e) Plastic & Reconstructive Surgery

3. Describe pre-operative evaluation, surgical indications in various surgical approaches, management and post operative care in above mentioned areas with possible complications.

4. Be able to read & interpret findings of the relevant investigations.

SURGERY-II (ORTHOPAEDICS)

OBJECTIVES: At the end of the course, the candidate will –

1. Be able to discuss the, aetiology, Pathophysiology, clinical manifestations & conservative / surgical management of various traumatic & cold cases of the Musculoskeletal Conditions.

2. Gain the skill of clinical examination; apply special tests & interpretation of the preoperative old cases & all the post-operative cases.

3. Be able to read & interpret salient features of the X-ray of the Spine & Extremities and correlate the radiological findings with the clinical findings.

4. Be able to interpret Pathological / Biochemical studies pertaining to Orthopaedic conditions.

MEDICINE-I

(Cardiovascular Respiratory Medicine, General Medicine & Gerontology)

OBJECTIVES:

At the end of the course, the candidate will:

1. Be able to describe Etiology, Pathophysiology, Signs & Symptoms & Management of the various Endocrinal, Metabolic, Geriatric & Nutrition Deficiency conditions.

2. Be able to describe Etiology, Pathophysiology, Signs & Symptoms, Clinical Evaluation & Management of the various Rheumatologic Cardiovascular & Respiratory Conditions.

3. Acquire skill of history taking and clinical examination of Musculoskeletal, Respiratory, Cardio-vascular & Neurological System as a part of clinical teaching.

4. Be able to interpret auscultation findings with special emphasis to pulmonary system.

5. Study Chest X-ray, Blood gas analysis, P.F.T. findings & Haematological studies, for Cardiovascular, Respiratory, Neurological & Rheumatological conditions.

6. Be able to describe the principles of Management at the Intensive Care Unit.

7. Be able to acquire the skills of Basic Life Support.

8. Acquire knowledge of various drugs used for each medical condition to understand its effects and its use during therapy.

MEDICINE-II (Neurology & Paediatrics)

OBJECTIVES:

At the end of the course, the candidate will:

1. Be able to describe Aetiology, Pathophysiology, signs & Symptoms & Management of the various Neurological &Paediatric conditions.

2. Acquire skill of history taking and clinical examination of Neurological &Paediatric conditions as a part of clinical teaching.

3. Acquire knowledge of various drugs used for each medical condition to understand its effects and its use during therapy.

4. Acquire knowledge in brief about intra-uterine development of the foetus.

5. Be able to describe normal development & growth of a child, importance of Immunization, breast-feeding & psychological aspect of development.

6. Be able to describe neuromuscular, musculoskeletal, cardio-vascular & respiratory conditions related to immunological conditions, nutritional deficiencies, infectious diseases, & genetically transmitted conditions.

7. Acquire skill of clinical examination of a neonate / child with respect to neurological, musculoskeletal & respiratory function.

COMMUNITY HEALTH & SOCIOLOGY

OBJECTIVES: At the end of the course, the candidate shall be able to understand the contents given in the syllabus.

GYNAECOLOGY & OBSTETRICS

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

1. Normal & abnormal physiological events, complications and management during Puberty.

2.Normal and abnormal physiological events, complications and management of pregnancy (Pregnancy, Labour, Puerperium)

3.Normal and abnormal physiological events, complications and management of menopause.

4. Normal and abnormal physiological events, complications and management of uro- genital dysfunction.(Antenatal, Postnatal, during menopause)

5. The student will be able to acquire the cognitive skill of clinical examination of the pelvic floor.

DERMATOLOGY

OBJECTIVES: At the end of the course, the student will be able to describe the Pathophysiology, Signs & Symptoms, Clinical Features, Examination & Management of Common Skin Conditions like Leprosy, Psoriasis, Bacterial & Fungal Infections of the skin, connective tissue disorder, hand eczema, drug reaction, cutaneous manifestation of HIV, & Sexually Transmitted Diseases

FUNCTIONAL DIAGNOSIS & PHYSIOTHERAPEUTIC SKILLS

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

1. Cognitive-

a. Understand the use of ICF.

b. Acquire the knowledge of human growth and development from new life to birth and adulthood

c. Understand structure and function of nerve and muscle as a base for understanding the electro-diagnostic assessment.

d. Understand the use of appropriate tools or instruments of assessment in Musculoskeletal, Neurological and Cardio-vascular conditions.

e. Understand the theoretical basis and principles of manipulative skills, neurotherapeutic skills and skills of cardiopulmonary care and resuscitation 6. Document results of assessment to evaluate the patient from time to time.

2.Psychomotor: Student will be able to:

a. Perform assessment of measures of body structures and functions related to tissue mechanics.

b. Perform assessment of measures of body structures and functions related to motor control affecting activity and participation, quality of life and independence.

c. Perform the skill of electro-diagnosis (SD Curve) and observe skills of EMG and NCV studies, to understand the .documentation of finding of these studies.

d. Interpretation and analysis of assessment and findings.

e. Demonstrate skills of manual therapy musculoskeletal, neurotherapeutics and cardiovascular and respiratory skills on models (Laboratory work).

3.Affective:

Student will be able to:

a. Select appropriate assessment techniques to facilitate safety, sensitive practices in patient comfort and effectiveness.

c. Demonstrate safe, respectful and effective performance of physical therapy handling techniques taking into account patient‟s clinical condition, need for privacy, resources available and the environment.

b. Follow the principles of appropriate handling technique that is draping, hand placement, body part positioning, manual techniques, lifting and transfer techniques.

d. Communicate with patients and their families/caregivers regarding the need and uses of various assessment techniques.

IV B.P.Th.

PROFESSIONAL PRACTICE AND ETHICS

OBJECTIVES: At the end of the course, the student will be compliant in following domains:

1.Cognitive: The student will

a. Be able to understand the moral values and meaning of ethics

b. Be able to learn and apply ethical code of conduct in fields of clinical practice, learning, teaching, research and physiotherapist-patient relationship

c. Acquire bedside manners and communication skills in relation with patients, peers, seniors and other professionals 4. Will acquire the knowledge of the basics in Managerial & Management skills, & use of information technology in professional Practice

2.Psychomotor: The student will be able to:

a. Develop psychomotor skills for physiotherapist-patient relationship

b. Develop the skill to evaluate and make decisions for plan of management based on sociocultutural values and referral practice

3.Affective: The student will be able to:

a. Develop behavioral skills and humanitarian approach while communicating with patients, relatives, society and co-professionals

b. Develop bedside behavior, respect & maintain patients‟ confidentiality

ADMINISTRATION, MANAGEMENT & MARKETING

OBJECTIVES: At the end of the course the student will be compliant in following domains:

1.Cognitive: The student will:

a. Learn the management basics in fields of clinical practice, teaching, research and physiotherapy practice in the community.

b. Acquire communication skills in relation with patients, peers, seniors and other professionals & the community.

c. Acquire the knowledge of the basics in Managerial & Management skills, & use of Information technology in professional Practice

2.Psychomotor: The student will be able to:

a. Develop psychomotor skills for physiotherapy practice.

b. Develop skill to evaluate and make decision for plan of management based on sociocultutural values and referral practice.

3.Affective: The student will be able to: Develop behavioral skills and humanitarian approach while communicating with patients, relatives, society at large and co-professionals.

MUSCULOSKELETAL PHYSIOTHERAPY

OBJECTIVES:

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

1.Cognitive:

a) Identify, evaluate, analyze & discuss primary and secondary musculo-skeletal dysfunction, based on biomechanical, kinesiological & patho-physiological principles.

b) Correlate the same with radiological, electrophysiological, biochemical/ haematological investigations as applicable & arrive at the appropriate Physiotherapy diagnosis with skillful evaluation of structure and function with clinical reasoning.

c) Understand the pharmaco-therapeutics, its interaction with physiotherapeutic measures and modify physiotherapeutic intervention appropriately.

d) Apply knowledge of psychosocial factors (personal and environmental factors in the context of disability associated with the musculo-skeletal system or multiple body systems) for behavioral and lifestyle modification and use appropriate training and coping strategies.

2.Psychomotor:

a) Apply theoretical basis of physiological effects, indications, contraindications; and best available evidence on the effectiveness, efficacy and safe application guidelines for a full range of physiotherapeutic strategies and interventions, including appropriate modes of soft tissue & joint mobilization, electrotherapy, therapeutic exercise, and appropriate ergonomic advise that can be employed to manage problems of the individual‟s structures, functions, activities and participation, capacity and performance levels associated with the musculo-skeletal system, for relief of pain & prevention, restoration and rehabilitation measures for maximum possible functional independence at home, workplace and in community.

b) Prescribe and train for appropriate orthoses, prostheses and walking aids based on musculoskeletal dysfunction.

3.Affective: Acquire ethical skills by demonstrating safe, respectful and effective performance of physical handling techniques taking into account the patient‟s clinical condition, the need for privacy, the physiotherapist, the resources available and the environment.

NEUROPHYSIOTHERAPY

OBJECTIVES:

At the end of the course, student will

1.Cognitive:

a) Be able to identify and analyze movement dysfunction due to neuromuscular skeletal disorders in terms of biomechanical and biophysical basis, correlate the same with the health condition, routine electrophysiological, radiological and biochemical investigations, and arrive at appropriate physical therapy diagnosis using WHO-ICF with clinical reasoning.

b) Be able to plan realistic goals based on the knowledge of prognosis of the disease of the nervous system and prescribe appropriate, safe evidence based physiotherapy interventions with clinical reasoning.

c) Understand infection control principles, best practices and techniques applicable to a range of setting where clients with neurological conditions would receive physiotherapy services.

d) Know determinacy of health (environmental, nutritional, self-management/ behavioral factors) and chronic disease management principles related to neurological health.

2.Psychomotor:

a) Be able to develop psychomotor skills to implement timely and appropriate physiotherapy assessment tools/techniques to ensure a holistic approach to patient evaluation in order to prioritize patient‟s problems.

b) Be able to select timely physiotherapeutic interventions to reduce morbidity and physiotherapy management strategies, suitable for the patients‟ problems and indicator conditions based on the best available evidence.

c) Implement appropriate neuro-physiotherapeutic approaches, electrotherapeutic modalities, joint and soft tissue mobilizations and ergonomic advice for neuromuscular skeletal systems, contextual factors to enhance performance of activities and participation in society.

3.Affective:

a) Be able to develop behavioral skills and humanitarian approach while communicating with patients, relatives, society and co-professionals, to promote individual and community health

CARDIO-VASCULAR & RESPIRATORY PHYSIOTHERAPY

(INCLUDING CRITICAL CARE)

OBJECTIVES:

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

1.Cognitive:

a. Identify and analyze cardio-vascular & pulmonary dysfunction in terms of bio- mechanical, and Bio-physical basis and correlate the same with the Health condition, routine electrophysiological, radiological, and biochemical investigations and arrive at appropriate Physical therapy diagnosis using WHO-ICF tool (Disability, Functioning and contextual factors) with clinical reasoning.

b. Plan, prescribe appropriate, safe physiotherapy interventions with clinical reasoning for and prevention of impairments, activity limitations, participation restrictions and environmental barriers related to cardio-vascular & pulmonary dysfunction in acute care settings, at home , work place, in society & in leisure activities.

2.Psychomotor:

a. Utilise skills such as executing exercise tests, PFT, Ankle brachial index, arterial & venous insufficiency tests

b. Utilise psychomotor skills to implement appropriate bronchial hygiene therapy, therapeutic exercise, electrotherapeutic modalities, CPCR, Intensive (critical) care, joint and soft tissue mobilisations, offering ergonomic & energy conservation advice for patients with cardio-vascular & pulmonary dysfunction.

c. Utilise the knowledge about contextual factors to enhance capacity and performance of activities and participation in society d. Utilise the skill to deliver cardiac, pulmonary & vascular rehabilitation

3.Affective:

a.Develop behavioral skills and humanitarian approach while communicating with patients, relatives, society at large and co-professionals b. Develop bed side behavior, respect & maintain patients‟ confidentiality.

COMMUNITY PHYSIOTHERAPY

OBJECTIVES:

At the end of the course the student shall:

1.Cognitive: Be able to describe:

a) The general concepts about health, disease and physical fitness.

b) Physiology of aging process and its influence on physical fitness.

c) National policies for the rehabilitation of disabled – role of PT.

d) The strategies to access prevalence and incidence of various conditions responsible for increasing morbidity in the specific community – role of PT in reducing morbidity, expected clinical and functional recovery, reasons for non-compliance in specific community environment & solution for the same.

e) The evaluation of disability and planning for prevention and rehabilitation.

f) Rehabilitation in urban and rural set up. g) Able to be a part of decision making team regarding the policies for the welfare of special communities & on issues of disability

2.Psychomotor:

a) Be able to identify with clinical reasoning the prevailing contextual {e.g. environmental and psycho-social cultural} factors, causing high risk responsible for various dysfunctions and morbidity related to sedentary life style and specific community like women, children, aged as well as industrial workers and describe planning strategies of interventional policies to combat such problems at community level.

b) Be able to gain the ability to collaborate with other health professionals for effective service delivery & community satisfaction

c) Utilize the research methodology knowledge for formulation of a research question (synopsis)

3.Affective: Be an empathetic health professional, especially for those in the community, who is away from the health institutions and having difficulty in healthcare access

PRINCIPLES OF BIOENGINEERING

OBJECTIVES: At the end of the course, the candidate shall

1. Cognitive:

a) Acquire knowledge about biomechanical principles of application of variety of aids & appliances used for ambulation, protection & prevention.

b) Acquire in brief knowledge about various material used for splints/ Orthoses & prostheses and their selection criteria

2.Psychomotor:

Acquire the skill of fabrication of simple splints made out of Low cost material

RESEARCH METHODOLOGY AND BIOSTATISTICS

OBJECTIVES:

At the end of the study of this subject the student should be able to:

1. Enumerate the steps in Physiotherapy research process.

2. Describe the importance & use of biostatistics for research work.

3. Acquire skills of reviewing literature, formulating a hypothesis, collecting data, writing research proposal etc

ELECTROTHERAPY

OBJECTIVES:

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

Cognitive:

1. Acquire the knowledge about the physiology of pain, Pain pathways & Methods of pain modulation, selection of appropriate modality for Pain modulations.

2. Describe the Physiological effects, Therapeutic uses, indication & contraindications of various Low/ Medium & High Frequency modes / Actinotherapy

3. Describe the Physiological Effects & therapeutic uses of various therapeutic ions & topical pharmaco -therapeutic agents to be used for the application of iontophoresis&sono/ phonophoresis

Psychomotor:

1. Acquire the skills of application of the Electro therapy modes on models, for the purpose of Assessment & Treatment.

   Acquire an ability to select the appropriate mode as per the tissue specific &area specific application.

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