

M.D. (PALLIATIVE MEDICINE)

[Syllabus Approved by Board of Studies, Medical & Health Sciences]

Programme Code	HLTH09A07
Programme Details	MD PALLIATIVE MEDICINE
Programme Learning Outcomes (PLOs / PSOs)	ANNEXED IN THE BELOW FORMAT
Eligibility Criteria	AS PER NMC NORMS
Duration of the Course	3 YEARS
Programme Structure (Credit-Based)	NA
Detailed Course Syllabus	ANNEXED IN THE BELOW FORMAT
Teaching–Learning Methodologies	3 YEARS RESIDENCY PROGRAM
Examination & Evaluation System	ANNUAL APPRAISALS FOLLOWED BY FINAL YEAR EXAMINATION AS PER NMC NORMS
Internship / Project / Dissertation Guidelines	1 YEAR MANDATORY BOND
Program In Charge	HEAD, DEPT OF PALLIATIVE MEDICINE

M.D. (PALLIATIVE MEDICINE)

Programme Code: HLTH09A07

Programme Outcome:

- Overall goal – The postgraduate trainee should have acquired knowledge base, attitude, clinical skills and professional behaviors required for competency and evidence based practice in palliative medicine.
- The postgraduate trainee should be able to
 - Explain pathophysiological basis of pain and other physical symptoms, assess comprehensively, use and select investigations and pharmacological and non pharmacological approaches for relief of pain and other symptoms.
 - Explain the role of psychosocial and spiritual-existential issues in illness and suffering, assess comprehensively, use and select appropriate measures for addressing these issues in a multidisciplinary setting and judiciously refer to specialist teams as required
 - Able to provide good supportive care and make clinical decisions and judgements in caring for patients with advanced life-limiting illnesses and their caregivers
 - Able to understand illness trajectory and course and available disease management options and treatments appropriate for patients
 - Able to communicate with and understand patients' and families' wishes, preferences and goals of care and respect their values and beliefs
 - Able to recognize the dying process and provide appropriate end of life care
 - Able to provide specialist palliative care in all settings of clinic, inpatient, home, hospice, respite care
 - Able to work in a multidisciplinary team with respect and cordiality and professionalism and supervise and mentor junior colleagues
 - Able to undertake research in palliative medicine
 - Able to provide leadership and advocacy
 - Able to efficiently organize human resource, finances, quality control issues and data management along with professional development and self-management

PROGRAMME CURRICULUM

MD in Palliative Medicine specialty training will consist of core and higher specialty training. Core training will be provided by the doctor:

▪ COGNITIVE DOMAIN

General Principles

- Definitions of: palliative care; general palliative care; specialist palliative care; hospice; palliative medicine; supportive care, terminal illness
- Re-adaptation and rehabilitation.
- Societal expectations and perceptions in progressing and advanced disease, death.
- Differing concepts of what constitutes quality of life (including measurement) and a good death.
- Describe the evolving nature of palliative care over the course of an illness, including integration with active treatment, and the significance of transition points
- Demonstrate an understanding of palliative care as a generic skill and duty of all healthcare professionals; and the need for appropriate inter professional communication
- Demonstrate appropriate communication skills, breaking news and breaking bad news
- Demonstrate competence in Advance Care Planning (ACP), including eliciting patient values, documenting goals of care, advance directives, and facilitating shared decision-making
- Demonstrate an awareness of the range of palliative care services available
- Discuss the history, progress and place of Palliative Medicine.
- Discuss the advantages, disadvantages and relevance of different models of palliative care in the procedure:
 - Hospital based services, Hospices, Home visit programmes, National Rural Health Mission and other Community participation
 - Describe the importance of Teamwork, Networking in Palliative Care

▪ Basic Science

- Describe the anatomical, physiologic and biochemical basis of pain including pain pathways, receptors, neurotransmitters and central sensitization.
- Anatomic and physiologic pathways and neurotransmitters involved in emesis.
- Understand the patho-physiologic basis of symptoms like constipation, malignant bowel obstruction, spinal cord compression, raised intracranial tension etc

- Discuss the pharmacology, pharmacokinetics, pharmaco-economics and drug interactions relevant to Palliative Care

▪ **Physical Care**

- Initial assessment - detailed history and examination;
- Judgment of benefits and burdens of investigations,
- Pathophysiology of a symptom (due to concurrent disorders and treatment related as well as cancer related aetiology)
- Treatments options, pharmacological, non pharmacological, Interventions & non-intervention.
- Not sure if this should be a mandate for Palliative Medicine Need for regular review of symptom response
- Methods of assessment of symptom response
- Management of intractable symptoms – recognition and support for patients,
- Need for, and skills in reassessment and review.
- Anticipation and pre-emption of problems
- Recognition of transition points during course of illness.
- Recognition of dying process.
- Crisis management.
- Shared care with other specialties – benefits, difficulties, facilitation

▪ **Psycho-social responses to illness**

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

- Describe the psychological responses to bad news and discuss the role of coping mechanisms
 - Describe the nature, stages and variations of grief:
 - Demonstrate an understanding of when grief becomes abnormal or complicated requiring intervention
 - Describe theories of bereavement including the process of grieving, adjustment to loss and the social model of grief
 - Describe the responses of children at different stages of grief and bereavement.
 - Epidemiological impact of bereavement
 - Risk factors for adverse outcomes of bereavement
 - Discuss the difference between sadness and clinical depression
 - Describe the different responses and emotions expressed by patients and caregivers, including fear, anxiety, guilt, anger, sadness and despair
-

- Identify psychological responses as a source of additional problems
 - For patient and family and as potentially obstructing the goals of care.

- Deal with
 - Anger and strong emotions
 - Anxious preoccupation
 - Transference
 - Collusion and conspiracy of silence
 - Denial

- Demonstrate an awareness that hope is important and give hope appropriate to the stage of the illness
- Demonstrate an awareness of other disciplines who could help patients to deal with psychological issues
- Demonstrate the ability to recognize unhelpful and potentially harmful psychological responses
- Understand the impact of insensitive delivery of bad news
- List potentially therapeutic interventions: psychological techniques, drug treatment and creative therapies including behavioural therapy, counseling,
- Demonstrate strategies for dealing with difficult questions or situations including uncertainty and prognosis
- Counselling for patients with HIV and their families
- Demonstrate an awareness of the importance of good communication between team members to ensure patients receive a consistent message
- Recognize the importance of documentation of all input with patients and families to ensure good communication with all team members
- Demonstrate awareness of:
 - The ill person in relation to his/her family, work and social circumstances
 - The impact of illness on interpersonal relationships
 - Impact of illness on body image, and role
 - Understanding of the concepts of resonance, family scripts, homeostasis in
 - Families and the impact of illness and loss on the family system
 - Awareness of transference and counter-transference in professional
 - relationships with patients and family members

- Assess the response to illness and expectations among family members
- When and how to use family meetings
- Ways to accommodate needs of partners and families in provision of palliative care in both an inpatient unit or home setting
- Palliative care provision in relation to the homeless
 - Illness in people with dementia or pre-existing psychological or psychiatric problems
 - Demonstrate an awareness of ways in which bereaved families could be supported economically
 - Accessing benefits, grants and allowances available to patients and families
- The role of the social worker and/or welfare benefits officer
- The financial implications of treatment and pharmaco-economics
- Discuss the importance of personal values and belief systems, and how these influence professional judgments and behaviours
- Recognize and manage the emotional and psychological impact of palliative care on oneself , the team and colleagues
- Discuss what makes a team work well and how to recognize when a team is struggling
- Demonstrate an awareness of healthy strategies for dealing with conflict among colleagues
- Demonstrate self awareness
- Awareness of own skills and limitations, and effect of personal loss or difficulties
- Ability to ask for help or hand over to others where necessary
- Potential sources of conflict in the doctor-patient relationship and how to deal with these including:
 - Over-involvement
 - Personal identification
 - Negative feelings/personality clash
 - Demands which cannot be met
 - Recognition and management of the emotional and psychological impact of palliative care on oneself, the team and other colleagues
 - Being a supportive colleague to other members of staff
 - Recognition of ways staff support can be offered/co-ordinated.
 - Discuss the importance of not imposing personal beliefs and attitudes, or those of

the team, on patients or their families

- Understand the importance of life review and restoration of dignity as a means of spiritual support
- Discuss the distinction between an individual's spiritual and religious needs
- Knowledge of the major cultural and religious practices that relate to death and bereavement.
- support patients and caregivers as they journey through spiritual and existential distress

▪ **Spiritual Care**

- Ability to distinguish between an individual's spiritual and religious needs
- Ability to elicit spiritual concerns appropriately as part of assessment
- Spirituality issues in relation to life-threatening physical illness and the role of spiritual care
- Ability to acknowledge and respond to spiritual distress, including referral to others
- Knowledge of pastoral systems within different religious groups and work with their representatives within the multidisciplinary team
- Knowledge of the major cultural and religious practices which relate to medical practice, dying and bereavement.

▪ **Culture, language, religion and spirituality**

- Recognition of cultural influences on the meaning of illness for patient and family
- Acknowledgement and accommodation of differences in belief and practice to ensure thorough assessment and acceptable care
- Awareness of personal beliefs and attitudes and the importance of not imposing these on others
- Ability to recognise and deal with conflicts of beliefs and values within the Team

▪ **Specific Disease Processes**

▪ **Non communicable diseases**

- Understand the pathological process and principles of management of Non-communicable diseases, including
 - End-stage lung disease
 - End-stage liver disease
 - End-stage renal disease
 - End-stage heart disease

- Advanced Neurological diseases
 - End-stage metabolic diseases including diabetes
 - Other non-communicable diseases
 - Cancer, including principles, practices and problems associated with the principles of cancer management.
-
- The presentation, paths of spread and current management of all major malignancies.
 - Radiotherapy
 - Chemotherapy
 - Surgery
 - Hormone treatment
 - Immunotherapy, hormone therapy, drugs, physical therapies,
 - Psychological interventions, complementary therapies).
- **Communicable diseases**
 - Understand the pathological process and principles of management of Communicable diseases
 - HIV-AIDS, including principles and problems associated with anti-retroviral therapy (ART)
 - Other communicable diseases
-
- **Specific symptoms and their management**
-
- **Pain**

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

 - Assess pain systematically (Nature, Site, Severity, Radiation, Palliating and provoking factors, temporal factors and meaning of the pain for the patient)
 - Identify common pain syndromes
 - Describe the WHO analgesic ladder and identify its key components
 - Discuss the relative benefits/ indications/ contra-indications of different analgesics
 - Discuss the role of adjuvant analgesics
 - Discuss the role of Pain interventions (Image-guided)
 - Identify physical, psychological, social and spiritual factors influencing pain
 - Understand the relevance of non-drug measures in pain management
 - Enumerate steps towards management of refractory pain

▪ **Gastrointestinal symptoms**

- Evaluate and manage common GI symptoms including nausea, vomiting, constipation, anorexia, bowel obstruction, hiccups, diarrhea, ascites, dysphagia and jaundice.
- Appropriate use of nasogastric tube
- Alternative methods of nutrition and hydration
- Give nutritional advice on end-of-life situation
- Understand the problems of force-feeding
- Understand the role of role of surgical procedures, GI interventions e.g stenting, NJ feed, feeding Gastrostomy and Jejunostomy.
- Understanding and demonstrating the role of US guided ascitic diagnosis and procedure (drain and pigtail)
- Understand stoma management in ostomies
- Liver failure

▪ **Cardio-respiratory symptoms**

- Enumerate the common causes of breathlessness, cough, hemoptysis and orthopnea
- Assess and manage
 - pleural and pericardial effusions
 - stridor,
 - superior venacaval obstruction
- Understand appropriate vs inappropriate use of oxygen and invasive ventilation
- Use opioids in dyspnoea
- Understand and manage terminal respiratory
- Understand breathing techniques as a therapeutic tool
- Understand the relevance of plurodesis
- Understanding and demonstrating the role of US guided pleural effusion diagnosis and procedure (drain and pigtail)
- Understand Prevention and management of pulmonary embolism

- COPD and common respiratory disorders
 - Thromboembolic disease
 - Ischaemic heart disease, heart failure, arrhythmias, hypotension
 - Peripheral vascular disease

 - **Genitourinary symptoms**
 - Manage vaginal discharge and bleeding per vagina.
 - Renal failure
 - Diagnose rectovaginal, rectovesical and vesicovaginal fistulae, and understand indications for surgery
 - Diagnose and manage bladder spasms
 - Manage urgency and dysuria/anuria
 - Understand the advantages and disadvantages of various methods of management of urinary retention and incontinence including
 - Identify and manage issues related to sexuality

 - **Neurological symptoms**
 - Early diagnosis of spinal cord compression and appropriate action
 - Peripheral neuropathy
 - Autonomic neuropathy
 - Manage
 - Raised intracranial pressure,
 - Seizures,
 - Delirium
 - Non –invasive ventilation

 - **Psychiatric Manifestation**
 - Diagnose And Manage The Following Conditions Within The Domain Of Palliative Medicine
 - Depression,
 - Dementia
 - Anxiety,
 - Panic,
-

- Confusional States,
 - Insomnia,
 - Hallucinations
 - Pre-Existing Drug Dependence
- **Oedema**
- Describe the causes, prevention and management of different types of oedema
 - Diagnose and manage lymphoedema
 - Diagnose and manage deep vein thrombosis, US guided DVT screening
 - Diagnose and manage acute inflammatory episodes and lymphorrhoea
 - Bandaging
 - Use of compression garments
- **Other Symptoms**
Diagnose and plan management of:
- Pathologic fractures, osteoporosis
 - Itching,
 - Pressure sores,
 - Fungating wounds,
 - Malodour,
 - Candidiasis,
 - Sore mouth,
 - Anaemia and Fatigue
 - Infections and infection control measures
 - Diabetes mellitus
 - Pre-existing chronic pain.
 - Hyper and hypothyroidism, adrenal failure, pituitary failure
 - Dermatological problems
 - Anxiety and depression, psychoses
- **Metabolic disorders**
- Assess and manage
-

- Hypercalcemia
- Hyponatremia
- Siadh
- Hypokalemia
- Hypoglycemia
- Dehydration

▪ **Rehabilitation**

- Principles of rehabilitation related to illnesses with gradually increasing disability.
- Concept of maintenance of function through exercise and therapies
- Recognition of changing goals during the course of an illness
- Dealing with patient / family conflict in relation to unrealistic goals
- Facilities available for rehabilitation
- Appliances available in the home
- Use of disablement centre for artificial limbs and appliances
- Support services available in the home

▪ **Care of the elderly – Geriatric Palliative Care**

- Understand, assess and manage
- Medical conditions specific to the elderly
- Psychological problems common in the elderly
- Social issues that are relevant to the care of the elderly
- Principles and practice of palliative care in the elderly
- Integration of palliative care into geriatric medicine

▪ **Pediatric Palliative Care**

- Understand, assess and manage
- Reactions of children to health issues specific to various age groups including relevance of parental separation
- Medical conditions requiring palliative care in childhood including neo-nates
- Procedure related pain in children
- Pain and other symptoms in children

- Psycho-socio-spiritual issues in children
 - Family support and bereavement support

 - **Palliative care Emergencies**
 - Assess and manage emergencies including
 - Bleeding
 - Spinal cord compression
 - Intestinal obstruction
 - Breathlessness and Others

 - **Care of the dying patient and their family**
 - Recognition of the dying phase
 - Initial assessment of the dying patient
 - Providing ongoing care for dying patients and their families:
 - Assessment of required medications
 - Recognising when to discontinue further investigations and treatment
 - Managing symptoms in the dying phase
 - Management of mouth care and bowel care
 - Psychological care of the family
 - Knowledge of major cultural and religious customs which relate to medical practice, dying and bereavement
 - Understanding of ethical dilemmas in the dying phase
 - Understanding pharmacology in dying patients, including use of a syringe driver, infusion pumps
 - Palliative care in Intensive Care Units and Emergency Departments, including:
 - Withholding and withdrawal of life-sustaining treatment
 - End-of-life care in ventilated patient
 - Rapid goals-of-care discussions in emergencies

 - **Death**
 - Prognosticate death
 - Demonstrate awareness of a care pathway
 - Assess and manage end of life situations including
-

- Terminal delirium
- Secretions and “rattles”
- Conflicts in family regarding end-of-life decisions
- Unrelieved symptoms
- Evaluate and reduce medications as appropriate
- Prepare the family for the changes that are likely to happen
- Understand the indications, role and modalities of Palliative Sedation Therapy Able to provide Tele-palliative care

PHARMACOLOGY AND THERAPEUTICS:

▪ General

- Analysis of therapeutic possibilities, weighing up benefits and burdens of treatment or intervention.
- Communication about therapeutic goals and possible adverse effects with patients and carers; enabling their input to decision making
- Communication about the above with others in the clinical team
- Compliance and non-compliance with treatments – reasons for noncompliance and ways of increasing compliance

▪ Drug Specific

- General principles of pharmacodynamics and pharmacokinetics
 - Routes of administration
 - Absorption, metabolism, excretion
 - Half-life, usual frequency of administration
 - Adverse effects and their management
 - Use in syringe drivers stability and miscibility
 - Interactions with other drugs
 - Possibility of tolerance, dependence, addiction and discontinuation reactions.
- Adjustment of dosage in frail, elderly and children
- Adjustment of dosage in altered metabolism, disease progression and last few days of life.
- Drug formularies in palliative care
- Managing a pharmacy budget; issues of cost versus benefit

- Prescribing – legal issues, generic prescribing
- Use of drugs on a named patient basis
- Use of drugs outside their product licence
- Use of drugs in clinical trials
- Problems of polypharmacy
- Helping patients and carers to understand and manage tablets

Access to essential medicines including opioids

- WHO pain ladder
- Understand the relevance of affordability of treatment measures, particularly in the context of the developing world.
- Describe the barriers to access to controlled medications particularly those that relate to the Narcotic Drugs and Psychotropic Substances (NDPS) act
- Describe the principle of balance
- Describe the measures that can be taken to ensure uninterrupted access to controlled medications
- Opioid availability:
 - Barriers to opioid availability
 - Legal status of opioid use in India
 - Obtaining opioids under NDPS act of 1985
 - The recent action to improve opioid availability and its impact
 - Procuring opioids under amended narcotic regulations.
 - Storing, dispensing and documentation for opioid use.

▪ **Ethics**

- Theoretical ethics
 - History of medical ethics, with emphasis on evolving philosophy and codes of practice.
 - Critical analysis of current theoretical approaches to medical ethics including ‘four principles (beneficence, nonmaleficence, justice and respect for autonomy).
 - Applied ethics in clinical practice of palliative care:
 - Acknowledgement of ethical issues in daily clinical practice and teamwork
 - Consent
 - Giving information
 - Confidentiality
 - Competence to make particular decisions
-

- Non-autonomous or incompetent individuals
 - Best interest judgements
 - Conflicts of interest between patient and their relatives
 - Responsibility for decisions (doctors, patients & teams)
 - Resource allocation (including of oneself)
 - Withholding and withdrawing of treatment (including hydration / extubation)
 - Euthanasia
 - Physician-assisted suicide
 - Doctrine of double effect
 - CPR decisions
 - Research / clinical trials
- **Legal Frameworks**
- Common laws related to health and in relation to end of life medical care including euthanasia and physician assisted suicide.
 - Death
 - Certification of death procedures, including definition and procedure for confirming brain death.
 - Cremation regulations.
 - Procedures for relatives following a death.
 - Procedures around post mortems.
 - Organizational
 - Corporate law relating to charities/trusts e.g. responsibilities/liabilities of trustees and employers
 - Laws & regulations relating to hospitals
 - Employment law
 - Discrimination – gender, race, disability, age

PSYCHOMOTOR DOMAIN

- **In practice a student should be able to**
- Use a syringe driver, infusion pumps

- Use the subcutaneous/intravenous route for drugs
 - Perform ingae guided peritoneocentesis, thoracocentesis
 - Perform rectal examination
 - Manage bowel in paraplegics and other bed-bound patients
 - Counsel families regarding stoma management
 - Perform pleurocentesis
 - Manage tracheostomy care
 - Use nebulisers
 - Reassure a patient and family in presence of breathlessness
 - Insert urinary catheter
 - Teach intermittent self-catheterisation to patient
 - Perform basic neurologic examination
 - Use a screening tool for identification of delirium
 - Use screening tools for diagnosing depression and anxiety
 - Teach the patient and family techniques for prevention and simple lymphatic drainage
 - Apply compression bandages and garments
 - Teach wound care including low cost dressings, mouth care, and pressure sore care to patient and family
 - Instruct a family in using subcutaneous fluids in the home setting
 - Counsel the patient and family in a life-threatening emergency
 - Management of stomas
 - Management of non-invasive ventilation
 - Management of epidural catheters
 - Simple nerve blocks and US guided pain interventions
 - TENS application
 - Ultrasound-guided procedures (pain and palliative procedures)
- **Communication skills**
- Demonstrate good communication skills
 - Demonstrate skills in active listening
 - Demonstrate empathy in interactions with patients, caregivers and fellow professionals
 - Elicit concerns across physical, psychological, social, and spiritual domains
 - Demonstrate the ability to deliver bad news sensitively and at an appropriate pace for the individual
-

- Discuss the importance of communication between professional, family and patient
 - Common barriers to communication for both patients and professionals
 - Management of difficult questions and information giving sensitively and as appropriate to wishes and needs of the individual
- **Perform role plays in**
- Assessment of emotional status of a patient who has just been told he has cancer or another life threatening disease
 - Empathic listening
 - Delivering bad news
 - Dealing with collusion
 - Empowering a patient in exercising autonomy in decision making
 - Interviewing the patient regarding personal relationships
 - Counseling regarding financial implications
 - Supporting a bereaved family member
 - Spiritual support for a terminally ill person of no faith or a different faith n spiritual support for a terminally ill person of no faith or a different faith
 - Communicating with a patient who asks for euthanasia
 - Explaining advanced care directives to a patient
 - Awareness and practice of a range of structures and styles of consultations
 - Critical evaluation of own consulting skills
- **Miscellaneous**
- Demonstrate skills in empowering the patient to exercise autonomy in decision making
 - Be a supportive colleague to other members of staff
 - Demonstrate the ability to communicate with and support bereaved and grieving person
 - Demonstrate the ability to elicit spiritual concerns and spiritual pain and respond appropriately including referrals to others if necessary.
 - Discuss the importance of changing goals during the course of an illness and the need for realistic goals
 - Identify important situations in which physical measures for rehabilitation will be useful and indicated
 - Know how to access support for such services.
 - Know how to provide/access measures of social rehabilitation including vocational rehabilitation
-

- Recognize the special needs of children in the patients' families including support for schooling.
 - Demonstrate the ability to apply an ethical framework to issues, incorporating the following ethical frameworks:
 - respect for the patient- autonomy
 - Patient confidentiality – assessing patient competence to make decision
 - weighing up the benefits and burdens of treatment- beneficence
 - assessing the risks versus benefits of each decision- non-maleficence
 - doctrine of double effect
 - balancing the rights of individuals and of society- justice
 - Demonstrate an awareness of guidelines produced by the Indian Society of Critical Care Medicine for end of life care
 - Describe the procedures involved in verification and certification of death and management of the dead body
 - Ethical guidelines in clinical research including Good Clinical Practice guidelines.

 - Describe Advanced Care Directives
 - Describe when and how artificial life support measures should be and can be withheld or withdrawn
 - Know when and how to obtain an informed consent for any procedure
 - Have clear understanding about the concept of euthanasia and its distinction from palliative sedation

 - **Research and Education**
 - Perform a literature search on a selected subject
 - Prepare a PowerPoint presentation
 - Demonstrate a presentation each for the public and for fellow professionals
 - Prepare a research question
 - Identify important peer-reviewed journals on palliative care
 - Know how to access literature
 - Gather knowledge related to basic and clinical trial methodology
 - Understand and be able to conduct-different phases of clinical trials,e.g.Phase I,II,III,IV and their implications in Palliative Medicine
 - Understand other types of research conducted in Palliative Medicine and their implications
 - Identify the levels of evidence among published research
-

- Demonstrate the ability to analyze the quality and implications of medical literature and apply new knowledge in the delivery of health care
 - Know important recent advances in the field
 - Demonstrate understanding of different teaching methods and structure, including lecturing, problem based learning, role play, bedside teaching
 - Demonstrate understanding of teaching contexts (eg. Size of group, professional or otherwise, undergraduate or postgraduate,
 - Demonstrate understanding of selection, preparation and presentation of teaching materials
 - Demonstrate understanding of how to make a lecture interactive
 - Demonstrate understanding of the role of supervision, mentoring, learning contracts, critical appraisal and feedback, experiential learning.
 - Plan learning aims, objectives, methods and outcomes.
 - Demonstrate understanding of the concept of continuing professional development.
 - Demonstrate understanding of framing suitable specific learning objectives.
 - Conducting clinical sessions for undergraduate medical students, nurses and paramedical workers
 - Prioritize core competencies in curriculum planning
 - Demonstrate an interest and ability to identify future areas of inquiry in medical research
 - Utilize knowledge of population based and evidence based medicine in making patient management decisions.
 - Have familiarity with basic research methodology, epidemiology, basic information technology skills
 - Plan the protocol of a research project, execute it and prepare final report.
 - Understand the ethical principles guiding medical research
 - Demonstrate knowledge of study design and relevance of sample size
- **Medical Statistics**
- Demonstrate knowledge of:
 - Basic concepts of medical statistics
 - Mean, median, mode, standard deviation, analysis of variance and correlations
 - Student's T test
 - Chi square test
 - Fisher's exact test
 - Non-parametric tests of significance
-

- Multivariate analysis
- Survival analysis-log rank test

▪ **AFFECTIVE DOMAIN**

▪ **Communication skills**

- Understand the basic principles of communication including the purpose, active listening and what not to do.
- Describe the steps in effective communication
- Understand possible reactions of patients and families to bad news and respond appropriately
- Understand reasons for collusion within the family and deal with it sensitively

▪ **Team Work**

- Theories of teamwork, e.g. psychological, psychodynamic, managerial
 - Identification of oneself in relation to these differing theoretical models of Teamwork
 - Understand the importance of teamwork in this setting and have an appreciation of the skills and contributions of different members of the team
 - Identify the role and responsibilities of doctors and other members in multiprofessional teams.
 - Understand the skills and contributions of other members of the multi-professional team.
 - Understand the skills and contributions of other members of the multi-professional team.
 - Team dynamics in different situations and over time
 - Forms of team support
 - Strategies which facilitate team functioning, and those which do not.
 - Understand the inevitability of conflict within a team, and strategies to manage this.
 - Understand Skill mix of a team, particularly in relation to the appointment of new members.
 - Know the basics of chairing of team meetings.
 - Balancing the needs of the different or overlapping teams of which the doctor may be a member at any one time
 - Wide application of teamwork to include all the professionals and organizations involved in the care of a particular patient, including nurses, statutory and voluntary organizations
 - The impact on patients and carers of the number of professionals who may be involved
-

in their care.

- Use self-care strategies for building resilience for self and team
- Help in peer support

ROLE OF SUPERVISION AND MENTORING

▪ Leadership skills

Demonstrate understanding of:

- Management of change
- Writing a job description and person specification
- Short-listing and interviewing skills
- Writing a reference
- Induction and training
- Mentoring skills
- Assessment of trainees/junior colleagues
- Motivating and leading a team
- Management styles
- Goal setting
- Short and long term strategic planning
- Negotiating, directing and delegating
- Principles of advocacy with Government and media
- Principles of involving the community in care

▪ Management of work

- Time management
- Working with a secretary
- Budget setting and management
- Planning, implementing and evaluating change

▪ Information management

- Patient data collection.
-

- Data protection act, including rights of access for patients to information held
- on them
- Computer security and backup systems

- **Management structures of the organization**
 - Running a palliative care unit
 - Supply of drugs to hospices, stock lists, financing and regulations for controlled drugs registration
 - Storage and retrieval of case notes
 - Health and safety issues
 - Equipment safety and maintenance
 - Role and management of staff and volunteers
 - Disposal of bodies
 - Awareness, training and networking with the community volunteers

 - Financial management
 - Public and charitable health funding structure
 - Interacting with fundraisers
 - Understanding accounts

 - Clinical Governance
 - Responsibilities of doctors; professional and organizational goals
 - Quality assurance in relation to service and organization
 - Service review and accreditation of palliative care services