



**Trivandrum Institute
of Palliative Sciences**



**WHO Collaborating Centre
for Training and Policy
on Access to Pain Relief**

The Indo-American Cancer Association and Pallium India Certificate Course in Pain & Palliative Care

THE CURRICULUM IN DETAIL

Cognitive Domain (Knowledge)

Basic sciences

The student would be able to

- Describe the anatomical, physiologic and biochemical basis of pain including pain pathways, receptors, neurotransmitters and central sensitization.
- Identify different types of classification of pain including: nociceptive/neuropathic, somatic/visceral etc.
- Understand the pathophysiologic basis of symptoms like nausea, vomiting, constipation, malignant bowel obstruction, spinal cord compression, raised intracranial tension etc.
- Discuss the pharmacology, pharmacokinetics, pharmaco-economics and drug interactions relevant to Palliative Care
- Describe the process of stocking and dispensing 'Essential Narcotic Drugs' used in pain management

General Principles

- Define: "palliative care"
- Demonstrate an understanding of the terms "palliative care" and "terminal illness".
- 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 responsibility of all healthcare professionals; and the need for appropriate inter professional communication.

- Discuss principles of communication including communicating bad news.
- Demonstrate an awareness of the range of palliative care services available.
- Discuss the history, progress and scope of Palliative Medicine.
- Discuss the advantages, disadvantages and relevance of different models of palliative care in the Indian Context:
 - Hospital based services
 - Hospices
 - Home visit programs
 - Community participation
- Describe the importance of Teamwork in Palliative Care
- Describe the importance of Networking in Palliative Care

Non communicable diseases [NCDs]

- Describe the determinants of health
- Understand the pathological process and principles of palliative care of Non-communicable diseases, including
 - Cancer, including principles, practices and problems associated with
 - Radiotherapy, Chemotherapy and Surgery
 - Integration of palliative care within comprehensive cancer care
 - Decision making regarding definitive care and palliative care at all stages
 - Supporting informed choices regarding treatment plans
 - Impact of palliative care on longevity and on outcome of definitive treatment.
 - *End-stage metabolic diseases including diabetes*
 - *Chronic obstructive pulmonary disease*

- *End-stage renal, hepatic and cardiovascular disease*
- *Other Chronic illness.*
- Describe the disease trajectories of common chronic progressive illnesses e.g. cancer, chronic systemic diseases [*renal, heart, liver, lung*], *dementia*.
- *Discuss prognosis based on the patient's situation within the trajectory*
- Describe the basic treatments *and complications of treatment* for the diseases
- *List the government policies in different NCDs and the related processes*

Communicable diseases

- Understand the pathological process and principles of care in communicable diseases
 - HIV-AIDS – Trajectory and the Palliative care needs throughout the disease trajectory
 - Principles and problems associated with anti-retroviral therapy (ART)
 - *Tuberculosis – as chronic disease*

Physical Symptoms:

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, and side-effects of different analgesics
- Discuss the role of adjuvant analgesics
- 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
- Describe possible reasons for non-adherence to prescribed treatment
- Describe the importance of review and ways of ensuring follow up
- Define the principle of opioid rotation

Differentiate between physical and psychological dependence on opioid

Access to essential medicines including opioids

- Understand the relevance of affordability of treatment measures.
- Describe the barriers to access to controlled medications particularly those that relate to the Narcotic Drugs and Psychotropic Substances (NDPS) Act and the implementation of Amendment 2014
- Describe the principle of balance (promoting access Vs preventing abuse/diversion)
- Describe standard operating procedures for procuring, stocking, prescribing, dispensing and documentation of “Essential Narcotic Drugs [ENDs]”.
- Describe the measures that can be taken to ensure uninterrupted access to controlled medications.

Gastrointestinal symptoms

- Evaluate and manage common GI symptoms including nausea, vomiting, constipation, anorexia, bowel obstruction, hiccups, diarrhea, ascites, dysphagia and jaundice.
- Understand basic pharmacodynamics of commonly used anti-emetic, and laxative drugs
- Understand the pharmacological and non-pharmacological management of malignant bowel obstruction
- Provide communications related to nutritional concerns and hydration in end-of-life situation
- Understand and explain the problems of force-feeding
- Understand and explain the role of surgical procedures, GI interventions

e.g. nasogastric tube, jejunostomy, colostomy, gastric venting tube, esophageal, colonic stents, biliary stents, intra-peritoneal catheters and their maintenance etc.

- Understand chronic stoma management
- Understand and counsel regarding tube feed and intravenous feeding at the end of life

Neurological symptoms

- Early diagnosis of spinal cord compression and its appropriate management
- Understand the principles to treat raised intracranial pressure, seizures, and delirium
- Understand the principles to assess and palliate symptoms of chronic neurological disorders like stroke, dementia, motor neuron diseases, Parkinson's disease

Psychiatric disorders:

Diagnose and manage the following conditions

- Depression
- Anxiety
- Panic disorders
- Delirium
- Insomnia

Understand the principles of psychotherapy, cognitive behavioral therapy.

Understand the pharmacokinetics, pharmacodynamics and drug interactions of commonly used anti-depressant, antianxiety medications, and anti-psychotic medications

Cardiorespiratory symptoms

- Enumerate the common causes of cough, dyspnea, palpitations in advanced diseases
- Assess and manage superior-venacaval obstruction
- *Understand, prevent and manage pulmonary embolism*
- Understand the management of dyspnea, including the use of opioids, oxygen, and nebulizers, relaxation and breathing techniques for dyspnea
- Understand non-pharmacological techniques as therapeutic tools in breathlessness
- Understand and manage “death rattle”

Metabolic disorders:

Assess and manage

- hypercalcemia
- hyponatremia

- SIADH
- hypokalemia
- hypoglycemia
- dehydration

Genitourinary symptoms

- Manage vaginal discharge and bleeding per vaginum in advanced cancer.
- Diagnose rectovaginal, rectovesical and vesicovaginal fistulae, and understand palliative principles to control discharge, pain and malodor and role of surgical interventions
- Diagnose and manage bladder spasms
- Identify and manage issues related to sexuality
- Manage urgency and dysuria
- Understand the advantages and disadvantages of various methods of management of urinary hesitancy, retention and incontinence
- Understand principles of decision making related to invasive interventions in advanced disease

Other symptoms

Understand the palliative principles to assess and treat:

- Itching
- Pressure sores
- Fungating wounds
- Malodor
- Candidiasis
- Sore mouth
- Fatigue

Emergencies

Assess and manage emergencies including

- Pain emergencies
- Bleeding
- Spinal cord compression
- Hypercalcemia
- Intestinal obstruction
- Breathlessness and Others

End of Life Care

- Prognosticate in advanced disease
- Communicate with professional colleagues regarding transitions in goals of care
- Discuss and support the family regarding transitions in goals of care in terminal stages of the disease
- Discuss and support the family in informed decision making regarding interventions towards terminal stages
- Demonstrate awareness of 'End of life care'

- Assess and manage end of life situations including
 - Terminal delirium
 - Respiratory Secretions and "rattles"
 - Conflicts in family regarding end-of-life decisions

- Unrelieved symptoms
- Evaluate and advice medications as appropriate for terminal stage of life
- Understand the indications, role and modalities of Palliative Sedation

Palliative Care for Special population

Care of the elderly:

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*
- *Pharmacokinetics, pharmacodynamics, and drug interactions in the elderly population*

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
- Procedure related pain in children
- Chronic pain and other symptoms in children
- *Psycho-socio-spiritual issues in children*

- *Family / sibling support and bereavement support*

Competency in common procedures²:

Student should be able to

- 1. Use a syringe driver**
- 2. Use the subcutaneous route for drugs**
3. Perform peritoneocentesis
4. Perform rectal examination
- 5. Perform high up enema for chronically constipated patient**
- 6. Manage bowel in paraplegics and other bed-bound patients**
7. Counsel families regarding stoma management
8. Perform pleurocentesis
9. Manage Tracheostomy care
- 10. Use nebulisers**
- 11. Palliative management of patient with breathlessness using non-pharmacological and pharmacological measures and be able to communicate with the family.**
12. Insert urinary catheter
13. Teach intermittent self-catheterisation to patient
- 14. Perform basic neurologic examination*
- 15. Use a screening tool for identification of delirium**

² Ten amongst those listed in **bold alphabets** are to be learnt and recorded in the log book.

- 16. Use screening tools for diagnosing depression and anxiety**
- 17. Teach the patient and family techniques for prevention and simple lymphatic drainage**
- 18. Apply compression bandages and garments**
- 19. Teach wound care including dressings, mouth care, and pressure sore care to patient and family**
- 20. Elicit and overcome concerns of the patient and family regarding opioid use**
- 21. Instruct a family in using sub-cutaneous fluids in the home setting**
- 22. Anticipate and counsel the patient and family towards a life-threatening emergency**
- 23. Assess and manage Pain emergencies**
- 24. Assess and manage a patient who is bleeding from an eroded vessel within the cancerous lesion**
- 25. Assess and manage spinal cord compression due to metastatic disease**
- 26. Assess and manage Hypercalcemia**
- 27. Assess and manage malignant bowel obstruction**
- 28. Assess and manage Pressure sores**
- 29. Assess and manage fungating wounds**
- 30. Assess and manage malodorous wounds**
- 31. Manage oral symptoms – Candidiasis, Sore mouth**
- 32. Estimate analgesic medication dosage for children**
- 33. Estimate analgesic medication dosage for young adults**
- 34. Estimate analgesic medication dosage for elderly persons**
- 35. Communication with professional colleagues regarding transitions in goals**

of care

36. Discuss with the family regarding transitions in goals of care and decisions in terminal stages of the disease

37. Use of medications as essential and appropriate for terminal stage of the individual patient

38. Assess and manage end of life symptoms - Terminal delirium, Respiratory Secretions [death rattles],

39. Assess and manage conflicts in family regarding end-of-life decisions 40. Use of palliative sedation for unrelieved symptoms

41. Arrange for religious inputs during the terminal stages, as per the wishes of the patient / family

42. Verification and certification of death 43. Prepare the dead person's body

44. Interacting with family after death

45. Supporting ways of storage /transporting the body

Psychosocial responses to illness

At the end of the course, the student will be able to understand assess, & manage

- Discuss the causes, assessment of common clinical issues like anxiety, depression, and fear
- Describe the psychological responses to bad news and discuss the role of coping mechanisms
- Demonstrate an awareness that hope is important and give hope appropriate to the stage of the illness

- Emotions and behaviours associated with grieving
- Pathological and complicated grief
- The impact of illness on interpersonal relationships
- Impact of altered body image due to illness
- Responses of children at different stages of grief and bereavement.
- The assessment of 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
- Describe role of 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
- 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
- Importance of personal values and belief systems, and how these influence professional judgments and behaviours
- Demonstrate self awareness:

- Awareness of own skills and limitations, and effect of personal loss
- Ability to know when to ask for help or delegate 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*
- Discuss the importance of not imposing personal beliefs and attitudes, or those of the team, on patients or their families
- Discuss the distinction between an individual's spiritual and religious needs
- Discuss the major cultural and religious practices related to death and bereavement, within the domain of their practice.

Affective Domain [Attitudes]

Communication skills:

Demonstrate skills in empathetic listening

- Discuss the importance of communication between professional, family and patient
- Elicit concerns of the person with illness, across physical, psychological, social, and spiritual domains
- Clinical communications: Examples
 - Explain the causes and meaning of pain and other symptoms to a patient or relative

- Explain the importance of being compliant with the suggested treatment, instructions and prescriptions through appropriate clarifications.
- Counsel a patient or family who are confused about curative/conventional treatment for cancer or other diseases and the role of palliative care with appropriate individualised information.
- Understand a patient who is reluctant to accept ART for HIV/AIDS and provide counsel
- Demonstrate the ability to deliver bad news sensitively and at an appropriate pace for the individual
- Assessment of emotional status of a patient who has just been told he has cancer or another life threatening disease
- Discuss the importance of changing goals during the course of an illness and the need for realistic goals
- Dealing with collusion
- Empowering a patient in exercising autonomy in decision making
- *Interviewing the patient regarding personal relationships*
- *Counseling regarding financial implications*
- Explain and respond on advanced care planning and health care proxy for a patient

Ethics:

- Demonstrate the ability to apply an ethical framework to situations
 - Describe Good Clinical Practice guidelines.

- Understand and respect the individual **autonomy**
- Patient **confidentiality** – assessing patient competence to make decision and empower with adequate information
- Understand what an **informed consent** implies and know when and how to obtain it for a procedure
- Weigh the benefits and burdens of treatment considering the biological, circumstantial, financial and quality-of-life consequences - **beneficence**
- Assess the risks and adverse consequences of suggested interventions / treatments on individual basis and communicate it effectively- **non-maleficence**
- Describe the doctrine of **double effect**
- Balancing the **rights** of individuals and of society- **justice**
- Demonstrate an awareness of guidelines produced by the Indian Association of Palliative Care [IAPC] and Indian Society of Critical Care Medicine [ISCCM] for end of life care in advanced progressive diseases

Ethics in End of Life Care

- Describe when and how artificial life support measures should be and can be withheld or withdrawn
- Describe the procedures involved in verification and certification of death²⁸
- Demonstrate clear understanding about the concept of assisted suicide, euthanasia and its distinction from palliative sedation

Leadership skills:

Demonstrate understanding of:

- Short and long term strategic planning for implementing a palliative care program in individual settings.
- Skills to influence administrators to modify institution policies positively towards pain management and palliative care
- Principles and methods of involving the community in care
- *Awareness of ongoing policies by state & central governments on chronic diseases and palliative care*
- *Understand the economics and business aspects of palliative care in practice settings.*

Team Dynamics:

- Understand the importance of teamwork in the practice setting and have an appreciation of the skills and contributions of different members of the Multi- disciplinary team [MDT]
- Identify and delegate the roles and responsibilities of members in the team.
- *Understand the basis of conflicts within a team, and practical strategies to manage this.*
- *Describe burn-out*

Research:

- *Describe ethical guidelines in clinical research*
- Able to perform a literature search on a selected subject

- Identify a research question
- Define “audit” and study quality improvement in care delivery through it

Business aspects of Palliative Care:

- Setting core goals and objectives of the palliative care program
- Differentiate paid service vs free clinic and its implications on the management of the program
- Justification of fund allotment based on core goals of the organization
- Describe the importance of needs assessment and be able to do it
- *Understand the marketing priorities of the organization*
- *Understand the development of budget of the organization*
- Understand the essential nature of multidisciplinary team members and incorporate the cost dynamics for the members of the chosen team
- Importance of location, space and stationary, including hardware and software and recurring needs including cost of maintaining the office
- *Understand the nuts and bolts of writing business proposal, including grant writing*
- *The costs involved, securing funding, and personnel salaries, including MDT members*
- Describe laws governing patient’s rights, doctor-patient relationship, abandonment etc
- Describe the importance of quality improvement and

sustainability of the operation

Summary of the Curriculum

By the end of their training the palliative care physician/nurse should have:

As Medical Expert/Decision Maker/ professional:

Knowledge of symptom management, psychosocial and spiritual issues in the palliative setting

Ability to comprehensively assess the patient using established tools

Ability to assess and manage pain using pharmacologic and non-pharmacologic means

Ability to assess and manage other symptoms including dyspnoea, cough, nausea, anorexia/cachexia, constipation, anxiety, depression, delirium, diarrhoea, fever, haemorrhage, mucositis, myoclonus, wounds etc.

Ability to manage common palliative care emergencies

Ability to demonstrate child and family centred and interdisciplinary approach

Understanding of differences in managing clinical situations of adults and children

Ability to anticipate and manage grief and bereavement

Ability to recognize and manage the end of life phase

Knowledge of presentation, natural history and management of common life-limiting illnesses

Knowledge of various influences on symptom presentation, assessment and management

Understanding of the concepts of ethical practice, confidentiality, informed consent, advance care planning, research ethics in the palliative setting

Understanding of issues of professional caregiver stress and burnout

Knowledge of major religious/cultural belief systems and influence on care of a

Person
As Communicator/Collaborator
Ability to establish therapeutic & supportive relationship with the patient and family
Ability to work collaboratively with interdisciplinary team
Ability to facilitate family conferences
Ability to demonstrate appropriate referral, consultation and communication with colleagues
Understanding of effect of illness on child and family
As Manager
Ability to work effectively & efficiently within the health care environment
Ability to develop and function as an interdisciplinary team, with clarity on roles & responsibilities of members.
Ability to interact and engage with other specialists involved in patient care
Manage resources effectively
Ability to identify and access resources to support the program
As Health Advocate
Knowledge of different models of palliative/End-of-Life (EOL) care
Ability to advocate for palliative care