Dr.NTR University of Health Sciences

Vijayawada

SYLLABUS

"POST DOCTORAL FELLOWSHIP

COURSE IN PAIN AND PALLIATIVE

MEDICINE"

for the academic year 2018-19

FELLOWSHIP COURSE IN PAIN AND PALLIATIVE MEDICINE

1. **Proper name of the course:** Fellowship course in Pain and Palliative Medicine

2. **Duration of the course:** One year

3. **I. Eligibility criteria for admission:** M.D/D.N.B Anaesthesia, M.D/DNB Radio Therapy recognized by the Medical Council of India / National Board of Examinations.
   II. Intake capacity: 2 per year

4. Complete curriculum of the course:

4.1. ***Statement of Goals & Specification of Objectives:***

A. Goal:

The goal of this curriculum is to create a cadre of specialist medical professionals who can provide comprehensive care to patients with incurable disease.

B. Objectives:

The objective of this training program in pain & palliative medicine is to train specialist doctors working full time in a hospital unit or team with responsibility to provide care for substantial numbers of patients with incurable diseases (which may not necessarily be malignant). The knowledge, skills & attitude to be imparted include.

a. Initial assessment of pain and other symptoms, their cause, diagnosis, and treatment of patients with incurable illnesses like cancer, HIV/AIDS and peripheral vascular diseases.
b. Daily assessment of the degree to which control of pain and other symptoms has been achieved.
c. Effective communication with the patient, family, community and other members of the multidisciplinary team.
d. To involve specialists in other disciplines such as Anesthesiology, oncologists, Surgeons Anesthesiologists, Radiotherapists, interventional Radiologists & Physicians for further measures such as interventional therapy, radiotherapy surgery, chemotherapy and specialized investigations to from a dedicated health care team for relief of pain & palliation.
e. Working in a multidisciplinary team, co-coordinating not only the specialist medical services, but also other professionals, e.g. Nurses, social work colleagues, physiotherapists, speech therapists, within an institutional setting, and together with the family doctor (if any) in the patient's own home.
f. With other professionals (as in d. above) working with families as well as patients for providing total care in their home environment and in providing bereavement support.

g. Advising clinical colleagues within hospitals or in the community about treatment and management approaches and possibilities for specific conditions.
h. Organisational matters and networking in the community.
i. Teaching and creating awareness of the specialist services in the community.
j. Research activities and auditing for the improvement of palliative care.
k. Undergraduate teaching in Pain and Palliative Care to the Medical & Nursing students.

4.2. ***Course Content:***

Demonstrable competences at consultant level will be expected in the following fields:

4.2.1 Assessment and consultant skills in the context of late or terminal illness due to a variety of causes. This will involve knowledge of: a wide spectrum of illness and diseases (particularly malignant disease) characterized by multiple symptoms; prognoses, options for management including treatment in various setting; the role of the multi-professional team in the care and support of patients and their families.

4.2.2 Detailed appreciation of patients' problems at the end of life, including spiritual, pain, and knowledge of symptom control including non-drug approaches, the place of intervention procedures, which may be surgical, anesthetic, radiotherapeutic etc, and complementary therapies, the management of common emergencies in late stage disease.

4.2.3 Appreciation of the scope and limitations of rehabilitation.

4.2.4 The pharmacology of drugs commonly used in symptom control in terminal illness.

4.2.5 The science and art of the palliative approach including the use of appropriate measurements such as quality of life indices in treatment/evaluation.

4.2.6 The principles of good communication.

4.2.7 Understanding of the processes of bereavement, grief and loss; effects of disease on body image and sexuality, psychological problems faced by patients and their families, the role of colleagues in psychiatry and psychology-normal and abnormal grief reactions.

4.2.8 Knowledge of the possibilities and limitations of care in the community for these patients including awareness of the various statutory and voluntary organizations involved.

4.2.9 Understanding of general management issues and responsibilities, which are part of the duties of consultants including personnel and contract, issues, relationship between Health service and voluntary bodies.

4.2.10 Knowledge of the ethics, principles and practice of clinical research, ability to evaluate the research literature and to promote, supervise and report a project or programme.

4.2.11 Ability to undertake clinical audit and to take the appropriate actions arising from the audit exercise.

4.2.12 Ability to contribute to professional education. This is likely to be for the benefit of undergraduates, postgraduates, other health care personnel and the volunteers from the community who are working with patients & their families.

4.2.13. General Topics**:** Research methodology, teaching methodology.

5. SYLLABUS

5.1. INTRODUCATION TO PALLIATIVE CARE

5.1.1. History, philosophy and definitions

- Definitions of: palliative care; general palliative care; specialist palliative care; hospice; palliative medicine; supportive care.
- Changing role of, and definitions within, palliative care over time (including extension to diseases other then cancer).
- Evolving nature of palliative care over the course of illness, including integration with active treatment, and the significance of transition points.
- 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.

5.1.2. **Personal qualities and attributes of palliative medicine physicians.**

- Tact, empathy, respect and concern for patients and their families
- Appropriate self confidence tempered by critical self-appraisal and a recognition of limitations.
- Teamwork.
- Balancing of (often subtle) therapeutic benefits and burdens.
- Liaison with a variety of other multi-professional teams.
- Judgment about when to act swiftly.
- Self-awareness in regard to personal coping strategies and management leadership style.
- Flexible and effective teaching skills.
- Reflective practice.
- Respect for social and religious values and practices, which differ from ones own.

- Awareness of the constraints and etiquettes of working differently in in different environments.

5.1.3. **Communication between services**

Recognition of the need for clear, timely communication between different service providers to provide a continuum of care for the patient between different setting e.g. home/hospital/outpatient centers. Shared care with other multi professional teams, taking either the leading or a supportive role in both hospital and community settings.

5. 2. Physical Care

5.2.1. Management of life limiting, progressive disease:

- Initial assessment – detailed history and examination; assessment of impact of situation on patient and family.
- Judgment of prognosis.
- Consideration of wide range of management options.
- Judgment of benefits and burdens of investigations, treatments, and non intervention.
- Acknowledgement of the 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.

5.2.2. Specific disease processes:

- The principles of cancer management.
- The presentation, paths of spread and current management of all major malignancies.
- The presentation, usual course and current management of other life limiting, progressive illnesses treated within specialist palliative care.

5.2.3. Management of concurrent clinical problems encountered in palliative care:

- Infections and infection control measures.
- Alternative methods of nutrition and hydration.
- Renal failure.
- COPD and common respiratory disorders.
- Thrombo embolic disease.
- Diabetes mellitus.
- Pre-existing chronic pain.

- Hyper and hypothyroidism, adrenal failure, pituitary failure.
- Ischemic heart disease, heart failure, arrhythmias, hypotension.
- Peripheral vascular disease.
- Peripheral neuropathy.
- Autonomic neuropathy.
- Dermatological problems.
- Liver failure.
- Anxiety and depression, psychoses.
- Fractures and osteoporosis.
- Pre-existing drug dependence.

5.2.4. Symptoms – understanding and management

5.2.4.1.Principles of symptom management:

- History taking and appropriate examination in symptom control
- Assessment of psychological and social and psychosocial experience for patients and attendants
- Need for diagnosis of pathophysiology of a symptom (due to concurrent disorders and treatment related as well as cancer related aetiology)
- The wide range of therapeutic options – disease modifying treatments and symptom modifying treatments (palliative surgery, radiotherapy, chemotherapy, immunotherapy, hormone therapy, drugs, physical therapies, psychological interventions, complementary therapies).
- Appropriate choice of treatment/non treatment considering burdens and benefits of all options.
- Management of adverse effects of treatment.
- Need for regular review of symptom response.
- Methods of assessment of symptom response.
- Management of intractable symptoms – recognition and support for patients, \attendants, multi-professional teams and self.
- Referral to other agencies when needed.

5.2.4.2. Pain:

- Physiology of pain
- History taking, physical examination and investigations in pain Assessment.
- Pain assessment tools – clinical and research
- Different types of pain-nociceptive, visceral, neuropathic.
- Drug treatment of pain – WHO analgesic ladder and appropriate use of adjuvant drugs.
- Range of opioids, relative benefits and indications.
- Indications for an appropriate use of opioid switching.
- Management of side effects of drug treatments.
- Assessment of burdens and benefits of treatments, including Radiotherapy.

- Non – drug treatment – TENS, acupuncture, physiotherapy, immobilization.
- Common nerve blocks and other neurosurgical procedures.
- Principles of spinal delivery of analgesics.
- Psychological interventions in pain management.
- Appropriate referral to and shared care with pain management service.

5.2.4.3. **Other symptoms and clinical problems**

Causes assessment and management of

- Sore mouth
- Nausea and vomiting
- Swallowing problems
- Constipation/ faecal impaction
- Diarrhoea
- Tenesmus
- Ascites
- Intestinal obstruction
- Jaundice, itching
- Breathlessness
- Cough
- Hiccups
- Airways/SVC obstruction
- Pleural and pericardial effusion
- Haemoptysis
- Bladder spasm
- Urinary obstructions
- Sexual problems
- Lymph edema
- Fistulae
- Wound breakdown
- Bleeding / fungating lesions
- Malodor
- Pressure sores
- Pathological fractures
- Anorexia, cachexia
- Weakness, lethargy
- Electrolyte disturbances e.g. hypercalcaemia, hyponatraemia,
- Paraneoplastic syndromes
- Inappropriate ADH secretion
- Raised intracranial pressure
- Communication problems
- Depression and other mood disorders
- Anxiety and fear
- Insomnia
- Confusional states

- Hallucinations
- Pre-existing drug dependence
- Treatment induced symptoms – radiotherapy, chemotherapy, immunotherapy, drugs
- Symptoms occurring in the last few days of life

5.2.5. **Management of emergencies in palliative medicine**

- Overwhelming pain and distress
- SVCO obstruction
- Hypercalcaemia
- Spinal cord compression
- Neutropaenia
- Massive haemorrhage

5.2.6. **Practical procedures**

Competence in the following

- Clinical history taking and examination of patients with advanced illness
- Management of stomas
- Management of tracheostomies
- Passing nasogastric tube
- Pleural aspiration
- Paracentesis
- Management of non-invasive ventilation
- Urethral catheterization
- Syringe driver set up
- Nebuliser setup
- Management of epidural catheters
- Simple nerve blocks
- TENS application

5.2.7. **Pharmacology and Therapeutics**

5.2.7.1. General

- The application of evidence based medicine to palliative care.
- Recommendations, guidelines and protocols – writing, implementation and use.
- The roles and limitations of drugs, physical therapies, psychological interventions and complementary therapies in palliative care.
- The use of appropriate measurement tools when assessing treatment response.
- Analysis of therapeutic possibilities, weighing up benefits and burdens of treatment or intervention.

- Communication about therapeutic goals and possible adverse effects with patients and attendants; enabling their input to decision making.
- Communication about the above with others in the clinical team.
- Compliance and non-compliance with treatments-reasons for Non-compliance and ways of increasing compliance.

5.2.7.2. Drug specific:

- General principles of pharmaco dynamics and pharmacokinetics
- 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 attendants to understand and manage tablets.

5.2.7.3. Drugs commonly used in palliative medicine or commonly taken by patients presenting to palliative care

- 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
- Availability in the community

5.2.7.4. 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.

5.2.8. Rehabilitation:

- General 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.

5.2.9. 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.
- Recognizing 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.

5.3. Psychosocial Care

5.3.1. Social and Family Relationships

- Appreciation of the ill person in relation to his/her family, work and social circumstances.
- Impact of illness on interpersonal relationships.
- Impact of illness on body image, sexuality and role.
- Assessment of the response to illness and expectations among family Members.
- When and how to use family meeting.
- 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 and those in custody.

- 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.

5.3.2. Communication with patients and relatives:

- Skills in empathic listening and open questioning to:
  - Elicit concerns across physical, psychological, social and spiritual domains.
  - Establish extent of awareness about illness and prognosis.
- 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.
- Facilitation of decision making and promotion of patient autonomy.
- Recognition and management of conflicts between confidentiality and the need to share information with others.
- Theories and evidence base for communication practice.
- Awareness and practice of a range of structures and styles of consultations.
- Critical evaluation of own consulting skills.

5.3.3. Phychological Responses of Patients and attendants to Life-threatening Illness and Loss:

- Recognition of the different responses and emotions expressed by the patient and others, including fear, guilt, anger, sadness and despair.
- Psychological impact of pain and intractable symptoms.
- Responses to uncertainty and loss at different stages in the illness.
- Illness in people with dementia or pre-existing psychological or psychiatric problems.
- Identification of psychological responses as a source of additional problems for patient and family and as potentially obstructing the goals of care.
- Dealing with
  - Anger and strong emotions
  - Anxious preoccupation
  - Transference
  - Collusion and conspiracy of silence
  - Denial
- Responses and needs of children (including siblings) at different developmental stages.
  - Distinction between sadness and clinical depression.
- Knowledge and application of therapeutic interventions including.

- Counseling
- Behavioral therapy
- Cognitive therapy
- Group activities

- Roles of relaxation/hypnotherapy, imagery and visualization, creative Therapies.
- Role and availability of the specialist psychological/psychiatric services and indications for referral.
- Dealing with violent/suicidal individuals; use of compulsory treatment.

5.3.4. Attitudes and Responses of Doctors and other Professionals:

- Awareness of personal values and belief systems, and how these influence professional judgments and behaviors.
- 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/coordinated

5.3.5. Grief and Bereavement:

- Theories about bereavement including the process of grieving, adjustment to loss and the social model of grief.
- Grief and bereavement in children.
- Recognition of multiple losses and effects on the individual.
- Preparation of attendants and children for bereavement.
- Support of the acutely grieving individual or family.
- Anticipation and identification of abnormal and complicated bereavement in Adults.
- Identification of appropriate bereavement support for an individual or family.
- Epidemiological impact of bereavement.
- Risk factors for adverse outcomes of bereavement.

5.3.6. Patient and Family Finance:

- Financial assessment.
- Exploring financial support available to patients and families.
- The role of the social worker

5.4. Culture, language, religion and spirituality

5.4.1. Culture and ethnicity:

- 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 recognize and deal with conflicts of beliefs and values within the Team.

5.4.2. Religion and spirituality:

- 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.

5.5.Ethics

5.5.1. 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, non-maleficence, justice and respect for autonomy).

5.5.2. 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 judgments
- 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 / non-hydration)
- Euthanasia
- Physician-assisted suicide
- Doctrine of double effect
- CPR decisions
- Research / clinical trials

5.6. Legal Frameworks

Common laws related to health and in relation to end of life medical care including euthanasia and physician assisted suicide.

5.6.1. 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.

5.6.2. Organizational:

- Corporate law relating to charities/trusts e.g responsibilities/liabilities of trustees and employers.
- Laws & regulations relating to hospitals.
- Employment low.
- Discrimination – gender, race, disability, age

5.7. Teamwork

- Ability to work in a team
- Theories of teamwork, e.g. psychological, psychodynamic, managerial.

- Identification of oneself in relation to these differing theoretical models of Teamwork.
- Role and responsibilities of doctors in multiprofessional teams.
- Skills and contributions of other members of the multiprofessional team.
- Nature of roles within teams: some overlapping, others professionally distinct, with the boundaries sometimes unclear.
- Team dynamics in different situations and over time
- Forms of team support
- Strategies which facilitate team functioning and those which do not.
- The inevitability of conflict within a team, and strategies to manage this
- Skill mix of a team, particularly in relation to the appointment of new Members.
- 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.

5.8. Teaching

Objectives:

- Be aware of different teaching methods and structure, including lecturing, problem based learning, role play, bedside teaching
- To learn teaching contexts (e.g. large/small group, undergraduate / postgraduate, medical/non medical)
- To learn selection, preparation and presentation of teaching materials
- Presentation skills.
- To learn methods of assessment including OSCE (objective structured clinical examination), observed long case, modified essay questions, project reports and case studies.
- To understand roles and responsibilities of trainee and trainer.
- To understand role of supervision, mentoring, learning contracts, critical appraisal and feedback, experiential learning.
- Planning learning aims, objectives, methods and outcomes.
- Concept of continuing professional development.
- Evidence based medicine including use of electronic databases and Worldwide web.

- Develop teaching skills appropriate to the groups and subjects to be taught.
- Undertake supervised teaching sessions.
- Understand how to evaluate a teaching programme.
- Understand the organization and content of training of other professional groups in palliative care.

5.9. Research.

5.10. Management

5.10.1. 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.

5.10.2. Financial Management:

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

6. *TEACHING SCHEME*:

6.1. Work distribution in parent department:

6.1.1. Outpatient clinic: Three hours a day, five days a week.
6.1.2. Inpatient care: Two hours a day, five days a week.
6.1.3. Home visit: An average of 4-5 hours, one day a week.
6.1.4. Once in 5-6 days, the trainee will have 24 hour on-call duty. If the situation demands, this may have to be converted to stay-in duty in the hospital.
6.1.5. For variable time, the trainee will observe, and perform under supervision various interventional procedures being done for pain management or palliative care.

6.2. Quality assurance program:

All through the course, the trainee (like all members of the department) is required to take part in the Incident Monitoring Program conducted by the department.

6.3. Classroom Sessions:

Three days a week, there will be 90 minutes' classroom sessions, 11 months a year, generally working out to at least 180 hours a year. Most of the learning process in these sessions will be interactive. The general pattern (annual) will be:

- Tutorials: 30 hours
- Case discussions 60 hours
- Journal clubs 30 hours
- Incident monitoring reporting and discussion sessions: 12 hours
- Invited lectures, seminars etc 48 hours
- In addition, the trainees are encouraged to take part in continuing medical
- Education programs, the minimum acceptable being 40 hours.

6.4. CLINICAL TRAINING:

During each week the trainee shall be able to:

6.4.1. Participate in consultant led out-patient consultation sessions for patients with pain and other chronic illnesses.
6.4.2. Participate in ward rounds.
6.4.3. Participate in consultant led treatment sessions.
6.4.4. Participate in, or observe, assessment or treatment sessions with other healthcare professionals.

6.5. CONSULTANT SESSIONS IN PAIN MANAGEMENT AND DELIVERY OF PALLIATIVE CARE:

6.5.1. There will be sufficient consultant sessions devoted to the management of acute, chronic and cancer pain, symptom control and psychosocial issues so that there is clinical supervision and training available for the trainee at all times throughout the week.
6.5.2. Consultants from other medical specialties such as oncology, orthopedics, anesthesiology, rehabilitation medicine and psychiatry will contribute to the supervision and training. (The consultants in

these & other specialties must be familiar with the aims and objectives of advanced training of pain management and palliative care).

6.6. Presentations:

In addition to attending all the academic sessions, the candidate needs to make a minimum number of presentations in these academic sessions during the training period of 1 year

	Frequency #
Presentations	
a. Seminars / Symposia	1 per month
b. Journal club	1 per month
c. Clinical case conference	1 per month
d. Research conference at state level - 1	
e. Research conference at national level - 1	
f. Bedside presentation	1 per month
g. Interdepartmental meeting	1 per month
h. Grand rounds	1 per week
i. Mortality meeting and audit meeting	1 per month
j. Record meetings	Once in 2 weeks

k. Teaching learning process will also take place during the daily ward rounds and during teaching rounds

May be increased if required.

6.7. Log book

The fellows shall maintain a Record Book (Log Book) of the work carried out by them on day to day basis & training program undergone during the period of training including details of procedures carried out independently or assisted by the candidate. The log book will be checked by the faculty members imparting the training. Candidates will be required to produce log book duly certified by the guide at the time of practical examination.

6.8. Development of attitude:

It is a very important aspect of management of patients with incurable disease. It would be the constant endeavor of the faculty to develop desirable attitudes in the PG trainees during the course by personal examples, interaction and group discussion. Constant watch will be maintained during their work in the wards to ensure that this objective is being met. Although there will be no formal evaluation of attitude, some aspects of this domain would be covered during the formative evaluation for continued internal assessment.

7. *Text books and reference books*:

Sl.No	Name of the Book	Author
1.	Handbook of Pain and Palliative Care	Moore, Rhonda J. (Ed.)
2.	A Physician's Guide to Pain and Symptom Management in Cancer Patients. 2nd edition	Abrahm JL John Hopkins University Press, 2005
3.	Supportive Care In Respiratory Disease	Sam Ahmedzai & Martin Muers(eds) Oxford University Press, 2005
4.	Palliative Care and Communication: Experiences in the Clinic,	Anne-Mei T. Open University Press, 2002.
5	The Palliative Response	F. Amos Bailey Menasha Ridge Press, 2005
6	Caring for the Dying: Critical issues at the edge of life.	Baird RM and Rosenbaum SE (Eds) Prometheus Books, 2003
7	Palliative Care Resuscitation.	Bass Madeline. John Wiley, 2006
8	Choices In Palliative Care - Issues in Health Care Delivery.	Blank Arthur E. and Sean O'Mahony (Eds).
9	Palliative Care: A Practical Guide for the Health Professional-Finding meaning and purpose in life and death.	Boog Kathryn M. and Claire Y. Tester. Churchill Livingstone, 2008
10	Primary Palliative Care: Dying, death and bereavement in the community.	Charlton R.(Ed) Radcliffe Medical Press, 2002.
11	Counselling Skills In Palliative Care	Davy Jand Ellis S Open University Press, 2000.
12	The Syringe Driver: Continuous subcutaneous infusions in palliative care, *2nd edition*	Dickman, A, Schneider, J, Varga J. Oxford University Press, 2005
13	Oxford Textbook of Palliative Medicine (3rd Ed)	Doyle D, Hanks, GW, Cherny N, Calman, KC (eds)
14	Psychosocial Aspects Of Pain: A handbook for Health Care Providers	Dworkin RH and Breitbart WS. (Eds)
15	Palliative Care -Core Skills and Clinical Competencies.	Emanuel Linda L and S. Lawrence Librach (eds). Elsevier Saunders, 2007
16	When Children Die: Improving Palliative and End-of-Life Care for Children and their Families.	Field MJ, Behrman RE (Eds) Institute of Medicine of the National Academies, National Academies Press, 2003.
17	Oxford Textbook of Palliative Care for Children	Ann Goldman, Richard Hain and Stephen Liben (Eds)

		Oxford University Press, 2006
18	Palliative Care Perspectives,	Hallenbeck JL. Oxford University Press, 2003.
19	Oncology for Palliative Medicine: Second Edition,	Hoskin, P and Makin W. Oxford University Press, 2003.
20	Hospice Inpatient Units in Healthcare Facilities - A Guide and Tool Kit Pentaview Collaboration	Ruven Liebhaber & J Koeper
21	Cancer Supportive Care - Advances in therapeutic strategies.	Lyman Gary H. and Jeffrey Crawford (Eds). Informa Health Care, 2008
22	Geriatric Palliative Care	R. Sean Morrison and Diane E. Meier (Eds). Oxford University Press, 2003.
23	The Complete Guide to Relieving Cancer Pain and Suffering,	Patt RB, Lang SS. Oxford University Press 2004.
24	Physician-Assisted Dying: The case for palliative care and patient choice.	Quill TE and Battin MP (Eds) Johns Hopkins University Press,2004
25	Pain and Palliative Care in the Developing World and Marginalized Populations: A Global Challenge.	Rajagopal MR, Mazza D, Lipman AG (eds) Haworth Press, 2003.
26	Chronic Pain Management - Guidelines for Multidisciplinary Program Development.	Schatman Michael and Alexandra Campbell (eds). Informa Healthcare, 2007
27	Palliative medicine.	Walsh Declan et al (Eds). Saunders Elsevier, 2008.
28	Textbook of Interdisciplinary Pediatric Palliative Care	Joanne Wolfe, Pamela Hinds and Barbara Sourkes (Eds). Saunders (Elsevier), 2011
29	Ethics and Palliative Care - A Case-based Manual	Roger Worthington (Ed) Radcliffe Publishing, 2005
30	Atlas of Common Pain Syndromes	Waldman, Steven
31	Atlas of Interventional Pain Management with DVD	Waldman, Steven
32	Atlas of Pain Management Injection Techniques	Waldman, Steven
33	Atlas of Uncommon Pain Syndromes	Waldman, Steven
34	Current Therapy in Pain	Smith, Howard
35	Essentials of Pain Medicine	Benzon, Honorio
36	Imaging of Pain	Waldman, Steven
37	Intrathecal Drug Delivery for Pain and Spasticity	Buvanendran, Asokumar
38	Mayler's Side Effects of Analgesics and Anti-inflammatory drugs	Aronson

39	Neurostimulation for the Treatment of Chronic Pain	Hayek, Salim
40	Pain Management	Waldman, Steven
41	Pain Management Secrets	Argoff, Charles
42	Pain Review	Waldman, Steven
43	Palliative Medicine	Walsh, T.
44	Physical Diagnosis of Pain with DVD	Waldman, Steven
45	Raj's Practical Management of Pain	Benzon, Honorio
46	Reducing Risks and Complications of Interventional Pain Procedures	Ranson, Matthew
47	Spinal Injections and Peripheral Nerve Blocks	Huntoon, Marc
48	Textbook of Interventional Cardiology	Wolfe, Joanne

8. *List of Journals* (Previous three years):

Sl.No	**List of Journals**
1.	Clinical Chiropractic
2.	Journal of Pain
3.	Journal of Pain and Symptom Management
4.	Pain
5.	Scandinavian Journal of Pain
6.	Journal of Pain and Palliative Care Pharmacotherapy
7.	American Journal of Hospice and Palliative Medicine
8.	Advances in Palliative Medicine
9.	BMC Palliative Care
10.	CA - Cancer Journal for Clinician
11.	European Journal of Pain
12.	European Journal of Cancer Care
13.	European Journal of Palliative Care
14.	Indian Journal of Palliative Care
15.	Journal of Cancer Pain and Symptom Palliation
16.	Journal of Palliative Medicine
17.	Palliative and Supportive Care
18.	Palliative Medicine
19.	Progress in Palliative Care