

Program Anesthesia Technician

Course Specification of Postoperative Pain management

Course No. (08 04 848)

2024

II. Course Description:

This course provides healthcare professionals with the knowledge and skills necessary to effectively manage postoperative pain in patients. Focused on evidence-based practices, the course covers various pain assessment techniques, pharmacological interventions, and non-pharmacological strategies for pain relief. Participants will learn about the physiological mechanisms of pain, the importance of individualized pain management plans, and the potential complications associated with inadequate pain control.

IV. Course Contents:

A. Theoretical Aspect:

No.	Units/Topics List	Sub Topics List	Number of Weeks	Contact Hours	Learning Outcomes (CLOs)
1	Introduction to Pain and Pain Management	- Definition of pain - Types of postoperative pain (acute vs. chronic) - Importance of addressing postoperative pain	1	2	a1, d2
2	Physiology of Pain	- Nociception and pain pathways - The role of neurotransmitters and receptors - Central and peripheral sensitization	1	2	a1, b1
3	Assessment of Pain	- Pain assessment tools and scales (e.g., Visual Analog Scale, Numeric Rating Scale) - Patient self-reporting and its significance - Non-verbal pain indicators, especially in non-communicative patients	1	2	a1, b1, c1, d1
4	Pharmacologic Interventions	Opioids: types, mechanisms, dosing, and side effects	3	6	a1, c1, d1



		Non-opioid analgesics: ○ NSAIDs, acetaminophen, and adjuvants Regional anesthesia ○ techniques (e.g., nerve blocks, epidurals) Considerations for ○ patient-specific factors (e.g., age, comorbidities)			
5	Non- Pharmacologi c Interventions	Physical therapy and ○ rehabilitation Psychological ○ approaches (e.g., cognitive-behavioral strategies) Alternative therapies ○ (e.g., acupuncture, massage)	1	2	a1, b1, c1, d1
6	Multimodal Pain Management	Principles and benefits ○ of multimodal analgesia Strategies for ○ combining pharmacologic and non-pharmacologic methods Case studies ○ demonstrating successful multimodal approaches	1	2	



		exam			
6	Complications of Pain Management	Opioid side effects and management (e.g., constipation, nausea) ○ Risk of addiction and dependence ○ Managing breakthrough pain and adjusting pain management strategies ○	3	6	a2, b2, c2, d2
7	Patient and Caregiver Education	Importance of patient involvement in pain management ○ Strategies for educating patients and families about pain management ○ Developing a realistic pain management plan ○	2	4	a2, c2, d2
8	Special Populations	Considerations for the elderly, pediatrics, and patients with special needs ○ Cultural influences on pain perception and management ○ Quality Improvement and Pain Management Protocols Guidelines and best practices for postoperative ○	3	6	a2, c2, d2.C3



		pain management Monitoring outcomes and patient satisfaction ○ Ongoing education and updates in pain management practices ○ Legal and Ethical Considerations • Understanding consent and patient rights regarding pain management ○ Ethical considerations in prescribing pain medications ○ Current Research and Future Directions • Latest advancements in pain management ○ Ongoing clinical trials and emerging therapies ○			
	Final term exam	Final term exam	1	2	a2, b2, c2, d2
Number of Weeks /and Units Per Semester			16	32	

V. Teaching Strategies of the Course:

- Interactive lecture
- Seminars and student presentations
- Brain storming
- Role-play and simulation
- Small group discussion
- Learning tasks and activities
- Problems solving



- Case study analysis

VI. Assessment Methods of the Course:

- Assignments
- Quizzes
- Mid-term exam
- Final term exam