Unit 1

Pain and Alterations in Comfort
## Performance Expectations

<table>
<thead>
<tr>
<th>Competency</th>
<th>Criteria/Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evaluate nursing care for clients with pain and alterations in comfort</td>
<td>Criteria for Assessment: <em>Your performance will be successful when:</em></td>
</tr>
<tr>
<td></td>
<td>- response differentiates acute pain from chronic pain</td>
</tr>
<tr>
<td></td>
<td>- response utilizes the nursing process for clients with pain and comfort alterations</td>
</tr>
<tr>
<td></td>
<td>- response describes the pathophysiology, etiology, and clinical manifestations of</td>
</tr>
<tr>
<td></td>
<td>pain and alterations in comfort</td>
</tr>
<tr>
<td></td>
<td>- response integrates pharmacological and non-pharmacological therapy in the care of</td>
</tr>
<tr>
<td></td>
<td>clients with pain and alterations in comfort</td>
</tr>
<tr>
<td></td>
<td>- response selects teaching/learning topics to promote self-care for the client with</td>
</tr>
<tr>
<td></td>
<td>pain and alteration in comfort</td>
</tr>
<tr>
<td></td>
<td>- response identifies available agency and community resources to promote care for</td>
</tr>
<tr>
<td></td>
<td>clients with pain and alterations in comfort</td>
</tr>
<tr>
<td></td>
<td>- response incorporates lifespan considerations</td>
</tr>
<tr>
<td></td>
<td><strong>Conditions: You will demonstrate your competence:</strong></td>
</tr>
<tr>
<td></td>
<td>- by responding to a case study or scenario of patients with pain and comfort alterations (format may be oral, written, or graphic)</td>
</tr>
</tbody>
</table>

## Learning Objectives

a. Examine the physical and psychological effects of unrelieved pain.
b. Distinguish between acute pain, chronic cancer pain, chronic noncancer pain, and neuropathic pain in terms of similarities and differences in assessment and management.
c. Compare pharmacologic pain management, including management of older adults and children.
d. Compare the non-pharmacologic strategies for pain management providing the rationale for each.
e. Identify available agency and community resources to help manage pain.
f. Practice in accordance with an ethical code that recognizes human rights, diversity, and requirement to “do no harm”
g. Provide patients and family members with information about a range of methods of pain relief and management
h. Identify and describe the delivery of a range of basic physical and psychological comfort measures, including positioning, information and distraction that enhance the well-being of all patients who have pain.
i. Describe the difference between physical dependence, psychological dependence (addiction), tolerance, and pseudo addiction.
j. Develop a plan to prevent and manage common adverse effects associated with treatment.
k. Describe how to safely administer prescribed analgesia using a range of routes, and how to monitor, record, and evaluate its effects on the patient.
l. Evaluate, select and use valid and reliable pain assessment tools that are appropriate to the needs of the individual patient and the demands of the care situation.
m. Recognize those individuals at risk for inadequate pain assessment and under treatment.
Unit 1 – Pain and Alterations in Comfort

n. Identify barriers to effective pain control, including those related to professionals, the system, as well as patients and their family.

o. Apply accurate knowledge of anatomy, physiology, psychology and sociology to all aspects of pain management.
Learning Activities

1. How might your personal experiences have shaped your attitudes about pain? Describe what has been helpful in managing pain you’ve had in the past – and what has not. For example, did people care about and sympathize with your pain? Did you get effective medication? Was medication given often enough? Reflect on your answers to these questions. Be PREPARED TO DISCUSS in class how this information can help you relate better to your patients’ needs and concerns.


5. PARTICIPATE in the activities on Pain during class.

6. READ “Cultural Diversity and Pain Management” by Anne Llewellyn in This can be located online at http://www.cahq.org/docs/2003/CulturalDiversityPainManagement.pdf

7. READ the study guide in syllabus: “A Brief Overview of Ethical Terms”


9. READ Study Guide (in the syllabus): Flowchart for Nursing Response to Suspected Excessive Opioid Dosing (narcotization) in Palliative Care Patients

10. READ: “Chronic Pain and Substance Abuse” from PART I: PRINCIPLES OF PRESCRIBING OPIOIDS Section 4 in Opioids and Chronic Non-Malignant Pain: A Clinicians’ Handbook. This is produced by the Oregon Health and Science University. It can be located at http://www.ohsu.edu/ahec/pain/part1sect4.pdf

Assessment Activities

1. Outside of class, RESPOND IN WRITING to case questions and SUBMIT your final answers to your instructor by the due date.

You will complete this case study INDIVIDUALLY. Use complete sentences or bulleted lists when responding. Include the resource you used to formulate your answer in parenthesis IMMEDIATELY following your response. Remember it is best ot use resources beyond those listed in the learning activities for this unit. If you utilized one of your textbooks, note the page number. Keep your rationale short (only 1-6 sentences). Only the first 6 sentences will be used to grade your response.

This assignment must be submitted before or during class on the due date.
Assignments submitted after class will be considered late and a point reduction penalty will be enforced. Assignments are due whether you are present in class or not.

Submit the grading sheet with your assignment.

2. Complete a multiple-choice unit exam without the use of resources during class.
STUDY GUIDE

A Brief Overview of Ethical Terms

Ethical issues can arise in many health care situations. This is true of pain management. I want to review some of the terminology related to ethical issues.

There are several moral or ethical principles that guide decision making. One of these is autonomy. **Autonomy** is a patient’s right to make decisions without outside control. Often autonomy is thought of as the right to refuse surgery or some other procedure. Remember, autonomy is deciding independently what should happen. It will include what the patient wants (and not just what they do not want.) The patient may want to do something that will cause harm to himself or herself. There are limits to autonomy. A person does not have the right to endanger others. For example, people are forced to take medications to treat tuberculosis.

Nurses also have a duty to benefit or do good. This is called **beneficence**. The challenge can be determining what exactly is good. Who can best make the decision about this good? If a physician orders it, does that make it good?

There is also a requirement that the nurse do not harm to their patients. This is called **nonmaleficence**. In addition to not causing harm, the nurse has a duty to prevent harm. Many procedures are associated with risk. Risks and benefits are weighed in making many clinical decisions.

The American Nurses Association (ANA) Code of Ethics states “the nurse provides services with respect for human dignity and the uniqueness of the client unrestricted by considerations of social or economic status, personal attributes, or the nature of health problems.” This statement supports the principle of **justice**. Justice is an obligation to be fair to all people. Justice involves the allocation of scarce resources.

The principle of **sanctity of life** is the belief that life is sacred. Because life is sacred, it must always be protected. One might ask: is it right to risk harm if life is sacred?

**Fidelity** is the obligation to be faithful to commitments. A nurse may have multiple commitments in their role. A nurse does have a commitment to the patient for whom they are providing care. It is as if there was a contract between the nurse and the patient.

**Veracity** is the duty to tell the truth. When using a placebo, the nurse is not telling the truth. Another term in ethics is the **doctrine of double effect**. A single action can have two effects. One of the effects is intended, while the other is not. The ANA Code of Ethics for Nurses includes the following statement:

The nurse should provide interventions to relieve pain and other symptoms in the dying patient even when those interventions entail risks of hastening death. However, nurses may not act with the sole intent of ending a patient's life even though such actions may be motivated by compassion, respect for patient autonomy and quality of life considerations. This statement by the ANA is an example of supporting the doctrine of double effect, while also supporting the sanctity of life.

Can you think of ways these principles apply to pain management?
STUDY GUIDE: Flowchart for Nursing Response to Suspected Excessive Opioid Dosing (narcotization) in Palliative Care Patients

Flowchart is based on the presence of a naloxone order

Suspicin of Excessive Opioid Dosing
- Decreased Level of Consciousness
- Progressive slowing of respiratory rate
- Small pupils, poorly reactive
- Clinical scenario (medication history) raises possibility

Stimulate patient
Administer oxygen 5 L/min nasal cannula

Unless respiratory rate (RR) is obviously severely depressed (long apnea) count respiratory rate for at least one minute

RR < 5/min
- Stop any ongoing opioid administration (e.g. discontinue infusions, remove Duragesic patches, & wipe skin clean)
- Administer naloxone (Narcan 1 ml (0.4mg) IV/SQ stat)
- Call MD
- Repeat naloxone 1 ml (0.4 mg) IV/SQ q 5-10 min. until patient rouses

RR 5-7/min
- Stop any ongoing opioid administration (e.g. discontinue infusions, remove Duragesic patches, & wipe skin clean)
- Dilute naloxone (Narcan) 1:10 in normal saline by drawing up 1 ml (0.4mg) into a 10 ml syringe and adding 9 ml sterile NS
- Administer 1 ml of the 0.04 mg/ml naloxone dilution STAT IV/SQ
- Call MD
- Repeat administration of 1 ml of the 0.04 mg/ml naloxone dilution q 5-10 min. until patient rouses

RR 8-10/min
- Call MD to review and consider options

RR > 10/min
- Patient does not become more alert with stimulation

Patient becomes more alert with stimulation

http://palliative.info
Mike Harlos MD
Classroom Activity

Patient: Missy Muffet
- Age: 83
- Weight: 118 pounds
- Diagnosis: Osteoporosis, compression fracture
- Activity: ambulate qid with assistance
- Diet: General
- Vital Signs: every shift
- IV: Saline Lock
- Therapy: OT & PT for conditioning and discharge planning
- Medications: alendronate (Fosamax) 70 mg po weekly (taken last Monday)
- vitamin D 400 international units po daily (taken this AM)
- calcium carbonate 500 mg po bid (taken this morning)
- ibuprofen (Motrin) 600 mg po tid (taken at 0600 and 1400)
- hydromorphone (Dilaudid) 1 mg IV q 2 hrs prn(taken at 0130,
  0700, and 1100)

Patient: Jack Horner
- Age: 61
- Weight: 176 pounds
- Diagnosis: degenerative joint disease, right hip arthroplasty
  (still in PACU)
- Activity: OOB with PT in the AM
- Diet: no added salt
- Vital signs: q 30 minutes x 4, q 1 hour x 4, then q 4 hours
- Pulse oximetry with vital signs, if < 90% start O2 at 3L per NC
- IV: D5 and 0.9 sodium chloride with 30 mEq KCl/liter at 125 ml
  per hour. May convert to saline lock in am if taking oral fluids well.
- Sequential stockings continuously when in bed
- Abduction pillow
- Keep heels off bed
- Protime and CBC in the AM
- Assess dressing with vital signs
- Medications: cefazolin, warfarin, enoxaparin, nalbuphine prn,
  ondansetron prn, naloxone prn, morphine prn, and an epidural
  for pain
Patient: Mary Contrary
- Age: 44
- Weight: 138 pounds
- Diagnosis: uterine leiomyomas total abdominal hysterectomy (surgery yesterday)
- Activity: Ambulate tid
- Diet: Full liquids, advance to surgical soft
- Vital signs with pulse oximetry: q 4 hours
- IV: 0.9 sodium chloride at 75 mL/hour
- Check perineal pads every 4 hours
- Change abdominal dressing daily and prn
- Foley catheter to gravity drainage, discontinue at 2400
- Medications: cefotetan (Cefotan) 1 gram every 12 hours IV
  - hydrocodone 5 mg/acetaminophen 500 mg (Vicodin) – 2 tabs q 4-6 hr prn (last dose at 1300)
  - morphine 2 mg IV every hour prn

Patient: Georgie Porgie
- Age: 22
- Weight: 161 pounds
- Diagnosis: sickle cell crisis
- Activity: bedrest
- Diet: as tolerated
- Vital signs: q 2 hours
- Neurological checks: q 2 hours
- Diet: Clear liquid, advance to general diet as tolerated.
- Encourage fluid intake to at least 3000 mL per day
- IV: D5 with 0.45 sodium chloride at 150 mL per hour
- Oxygen: 4L/minute/nasal cannula
- Medications: docusate (Colace) 100 mg po bid
  - zolpidem (Ambien) 5 mg PO at bedtime prn sleep
  - promethazine (Phenergan) 25 mg IV q4hr prn nausea/vomiting
  - hydroxyurea (Droxia) 1100 mg daily
  - hydromorphone (Dilaudid) 4 mg IV q 4 hours prn
  - ibuprofen 600 mg PO q 6 hours
Case Study: Patients in Pain

Alan Pinkler, age 67, is admitted for a total right knee replacement. Immediately following surgery his orders include epidural patient controlled analgesia (EPCA) with ropivacaine and fentanyl. Additional medication orders include morphine 0.2 mg IV prn every 10 minutes for pain not controlled by the EPCA, cefazolin 1 gram IVBP every 8 hours x 3 doses, celecoxib 100 mg twice a day, oxycodone controlled-release 20 mg twice daily, warfarin 5 mg daily, and docusate sodium 100 mg daily. He states he has pain in his right knee, which he describes as throbbing and as a 5 out of 10. He has orders to sit in the chair for dinner.

Calvin Peterson has had diabetes since the age of 5. He is now 34 years old. He suffers from numerous chronic complications of diabetes. He suffers from depression that has led to alcohol abuse. He is admitted with pneumonia, but his primary complaint is lower extremity pain. He describes the pain as a burning sensation that starts in his toes and moves up his legs. He rates the pain as a 7. He receives regularly scheduled amitriptyline (Elavil) 25 mg at bedtime and gabapentin (Neurontin) 100 mg three times daily. He states over the past few months his pain has worsen and these drugs are not adequate. He is no longer able to go fishing, one of his favorite activities. His sleep is often interrupted and he frequently is unable to go to work because of lack of energy. He is requesting narcotics, but his physician is reluctant to order them because of Calvin’s history of alcohol abuse.

1. Which of the following two patients is most likely to have an increase in heart rate and blood pressure, difficulty concentrating, restlessness, and a decrease in pain as his body heals? Explain your answer choice by comparing and contrasting the two patients.
   a. Alan Pinkler.
   b. Calvin Peterson.

2. Alan Pinkler’s pain management includes an epidural catheter with ropivacaine and fentanyl. Which of his other medications is of greatest concern because of the epidural route of medication administration? Provide rationale and list 4 additional nursing considerations associated with epidural medication administration.
   a. cefazolin
   b. celecoxib
   c. oxycodone
   d. warfarin
   e. docusate
3. Select **TWO** non-pharmacologic interventions you would initiate for controlling Calvin Peterson’s pain. Why would you suggest these two interventions for his pain? Describe specifically how you would implement this intervention.
   a. Imagery
   b. Hypnosis.
   c. Distraction.
   d. Acupuncture.
   e. Elastic stockings.
   f. Therapeutic touch.
   g. Relaxation techniques.
   h. Cutaneous stimulation (TENS).

4. Calvin is requesting a referral to “someone who can help his chronic pain and give him his life back”. Would you suggest a pain clinical for a patient with Calvin’s complaints? Provide rationale to support your answer.
**Pain Case Study Grading Sheet**

Name ______________________________________________________  

<table>
<thead>
<tr>
<th>Score</th>
<th>Competency Number</th>
<th>Competency</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 9 8 7 0</td>
<td>#1</td>
<td>Response differentiates acute pain from chronic pain.</td>
</tr>
<tr>
<td>10 9 8 7 0</td>
<td>#4</td>
<td>Response integrates pharmacological therapy in the care of clients with pain and alterations in comfort.</td>
</tr>
<tr>
<td>10 9 8 7 0</td>
<td>#5</td>
<td>Response integrates non-pharmacological therapy in the care of clients with pain and alterations in comfort.</td>
</tr>
<tr>
<td>10 9 8 7 0</td>
<td>#7</td>
<td>Response identifies available agency and community resources to promote care for clients with pain and alterations in comfort.</td>
</tr>
</tbody>
</table>

**TOTAL SCORE** ______________

**Grading scale:**  
10 - Provided accurate information with detailed explanations using information beyond assigned course learning activities.  
9 - Provided accurate information with clear explanations. Only used assigned resources. Missing minor points in answer. Provided rationale without selecting a choice for multiple choice questions.  
8 - Did not discuss in detail. Response is not complete. Response is less than 90% accurate.  
7 - Did not give accurate information, selected wrong choice, or response did not relate to question.  
0 - No response to the question.
Study Guide for Unit 1 Exam

1. Define pain. How does McCaffery define pain?
2. Pain is not adequately treated in all areas of health care. According to your textbook which 3 populations are at highest risk for inadequate treatment?
3. Describe ethical principles involved with pain management.
4. Explain the physical nature of pain. Include an explanation the steps of nociception (transduction, transmission, perception, and modulation.)
5. Explain the psychological nature of pain.
6. Describe how developmental level (age), cultural background, and spiritual beliefs contribute to the pain experience.
7. What are ways the nurse can make pain assessment and treatment a priority in their plan for the day? What is the purpose of declaring pain to be the “fifth vital sign”?
8. What is the difference between pain threshold and pain tolerance? What factors decrease tolerance? What interventions can increase pain tolerance? Make sure you focus on tolerance.
10. Identify questions to include when assessing pain. How does a pain assessment begin?
11. What action should the nurse use if objective observations indicate pain, but the patient denies pain?
12. Why might a nurse direct a client to keep a pain diary?
15. What should be considered when assessing or treating pain in an elderly adult?
16. How do symptoms of chronic pain differ from acute pain? How will this influence assessment and analysis of data activities of the nurse?
17. Give examples of disorders associated with chronic pain.
18. Explain referred pain. How would you explain this to a patient?
19. Identify patient pain history information that will be useful to collect prior to developing a care plan to treat pain.
20. What are consequences of unrelied pain in children?
21. What are consequences of unrelied pain in adults? What are symptoms of unrelied pain?
22. Identify (write) measurable goals appropriate for a patient with acute pain. With chronic pain.
23. Describe how to use non-pharmacologic interventions in treating pain.
24. Describe from a physiological standpoint, why non-pharmacologic interventions for pain are effective (describe the gate control theory.)
Unit 1 – Pain and Alterations in Comfort

25. Describe the actions of various drugs used to treat pain.
26. Which adjuvant medications are commonly utilized for a patient with neuropathy?
27. Which NSAID can be given parenterally?
28. What are common side effects of opioid agonists, NSAIDs and acetaminophen? Which of these side effects are of highest priority?
29. What is the maximum recommended daily dose of acetaminophen?
30. How can a patient decrease their risk of constipation associated with opioid use?
31. What nursing interventions are indicated when a patient's respiratory rate decreases while receiving opioids? (What is done first?) Does this vary from treatment of an overdose?
32. Describe barriers involved in the treatment of pain. Consider both patient barriers and health care provider barriers. What interventions can be used to overcome those barriers?
33. How should the nurse respond to a patient who is reluctant to take pain medications?
34. What are common side effects of opioid agonists, NSAIDs and acetaminophen? Which of these side effects are of highest priority?
35. What is the role of the nurse in titrating pain meds?
36. What instructions should be given to a patient with a patient-controlled analgesia (PCA) devise?
37. What actions are appropriate if a patient is not receiving adequate pain relief from their PCA (or other pharmacologic intervention)? Can you prioritize these actions?
38. What is the treatment for itching when a patient is receiving epidural pain control? For urinary retention?
39. Describe nursing considerations when using continuous subcutaneous opioid analgesia (medication delivered with a CADD pump). What sites are used for this therapy?
40. When a patient experiences breakthrough pain, what drugs might be used to treat it?
41. What are nursing priorities for a patient with an epidural catheter?
42. What complications are associated with the use of epidural medications? How should the nurse respond to symptoms of complications?
43. What is the difference between addiction, physical dependency, and tolerance?
44. What are signs of opioid withdrawal?
45. Describe anticipated adjustments that are indicated in the dose of analgesics for a patient with a history of substance abuse.
46. What is meant by equianalgesic? What oral meds and doses are equivalent to parenteral morphine? (This may take some memorization).
47. What are key items to document regarding pain and pain management?
48. Describe the role of the nurse within the multidisciplinary pain management team. Consider the role of the nurse as an advocate. What would you do if the physician has inaccurate beliefs regarding pain management?
49. Identify situations in which the nurse might suggest a referral to a pain clinic or pain specialist. What information is included in the referral?

50. Identify complementary and alterative therapies to use when caring for the patient in pain.

51. Describe considerations when using a TENS unit. What should the nurse teach the patient about the TENS unit?

52. Describe when and how Narcan is given.

53. Identify situations in which invasive pain management techniques are used for chronic pain.

54. When and how should the patient be allowed input into the plan of care for treating pain?