



April 2008

Dear Colleague:

The “Knowledge and Attitudes Survey Regarding Pain” tool can be used to assess nurses and other professionals in your setting and as a pre and post test evaluation measure for educational programs. The tool was developed in 1987 and has been used extensively from 1987 - present. The tool was revised and is now being tested in pain education courses to conduct psychometric analysis on this updated version. There have been minor edits in April 2008.

Regarding issues of reliability and validity: This tool has been developed over several years. Content validity has been established by review of pain experts. The content of the tool is derived from current standards of pain management such as the American Pain Society, the World Health Organization, and the Agency for Health Care Policy and Research. Construct validity has been established by comparing scores of nurses at various levels of expertise such as students, new graduates, oncology nurses, graduate students, and senior pain experts. The tool was identified as discriminating between levels of expertise. Test-retest reliability was established ($r > .80$) by repeat testing in a continuing education class of staff nurses ($N=60$). Internal consistency reliability was established ($\alpha > .70$) with items reflecting both knowledge and attitude domains.

Regarding analysis of data: We have found that it is most helpful to avoid distinguishing items as measuring either knowledge or attitudes. Many items such as one measuring the incidence of addiction really measures both knowledge and attitude about addiction. Therefore, we have found the most benefit to be gained from analyzing the data in terms of the percentage of complete scores as well as in analyzing individual items. For example, we have found it very helpful to isolate those items with the least number of correct responses and those items with the best scores.

Enclosed for your use is a copy of our instrument and an answer key. You may use and duplicate the tool for any purpose you desire in whole or in part. References to some of our studies which have included this tool or similar versions are included below.

We also acknowledge the assistance of several of our pain colleagues including Pam Kedziera, Judy Paice, Deb Gordon, June Dahl, Hob Osterlund, Chris Pasero, Pat Coyne and Nessa Coyle in the current revisions. If using or publishing the tool results please cite the reference as “**Knowledge and Attitudes Survey Regarding Pain**” developed by **Betty Ferrell, RN, PhD, FAAN and Margo McCaffery, RN, MS, FAAN**, (<http://prc.coh.org>), revised 2008.

We hope that our tool will be a useful aid in your efforts to improve pain management in your setting.

Sincerely,

Handwritten signature of Betty R. Ferrell in black ink.

Betty R. Ferrell, RN, PhD, FAAN
Research Scientist

Handwritten signature of Margo McCaffery in black ink.

Margo McCaffery, RN, MS, FAAN
Lecturer and Consultant

References:

1. McCaffery M, Ferrell BR (1994). "Understanding opioids & addiction." Nursing 94, 24(8): 56-59.
2. Ferrell BR, McCaffery M, Rhiner M. (1992). "Pain and addiction: An urgent need for changing nursing education." Journal of Pain and Symptom Management, 7(2): 117-124.
3. Ferrell BR, Grant M, Ritchey KJ, Ropchan R, Rivera LM (1993). "The Pain Resource Nurse Training program: A unique approach to pain management." Journal of Pain and Symptom Management, 8(8): 549-556
4. Ferrell BR, McCaffery M (1997). "Nurses' knowledge about Equianalgesic and opioid dosing." Cancer Nursing, 20(3): 201-212
5. McCaffery M, Ferrell BR (1997). "Nurses' knowledge of pain assessment and management: How much progress have we made?" Journal of Pain and Symptom Management, 14(3): 175-188
6. Ferrell BR, Virani R (1998). "Institutional commitment to improved pain management: Sustaining the effort." Journal of Pharmaceutical Care in Pain and Symptom Control, 6(2): 43-55
7. McCaffery M, Ferrell BR (1997). "Influence of professional vs. personal role on pain assessment and use of opioids." The Journal of Continuing Education in Nursing, 28(2): 69-77
8. McCaffery M, Ferrell BR (1999). "Opioids and pain management - What do nurses know?" Nursing 99, 29(3): 48-52
9. McCaffery M, Ferrell BR, Pasero C (2000). "Nurses' personal opinions about patients' pain and their effect on recorded assessments and titration of opioid doses." Pain Management Nursing, 1(3): 79-87

Knowledge and Attitudes Survey Regarding Pain

True/False – Circle the correct answer.

- | | | |
|---|---|--|
| T | F | 1. Vital signs are always reliable indicators of the intensity of a patient's pain. |
| T | F | 2. Because their nervous system is underdeveloped, children under two years of age have decreased pain sensitivity and limited memory of painful experiences. |
| T | F | 3. Patients who can be distracted from pain usually do not have severe pain. |
| T | F | 4. Patients may sleep in spite of severe pain. |
| T | F | 5. Aspirin and other nonsteroidal anti-inflammatory agents are NOT effective analgesics for painful bone metastases. |
| T | F | 6. Respiratory depression rarely occurs in patients who have been receiving stable doses of opioids over a period of months. |
| T | F | 7. Combining analgesics that work by different mechanisms (e.g., combining an opioid with an NSAID) may result in better pain control with fewer side effects than using a single analgesic agent. |
| T | F | 8. The usual duration of analgesia of 1-2 mg morphine IV is 4-5 hours. |
| T | F | 9. Research shows that promethazine (Phenergan) and hydroxyzine (Vistaril) are reliable potentiators of opioid analgesics. |
| T | F | 10. Opioids should not be used in patients with a history of substance abuse. |
| T | F | 11. Morphine has a dose ceiling (i.e., a dose above which no greater pain relief can be obtained). |
| T | F | 12. Elderly patients cannot tolerate opioids for pain relief. |
| T | F | 13. Patients should be encouraged to endure as much pain as possible before using an opioid. |
| T | F | 14. Children less than 11 years old cannot reliably report pain so nurses should rely solely on the parent's assessment of the child's pain intensity. |
| T | F | 15. Patients' spiritual beliefs may lead them to think pain and suffering are necessary. |
| T | F | 16. After an initial dose of opioid analgesic is given, subsequent doses should be adjusted in accordance with the individual patient's response. |
| T | F | 17. Giving patients sterile water by injection (placebo) is a useful test to determine if the pain is real. |
| T | F | 18. Vicodin (hydrocodone 5 mg + acetaminophen 500 mg) PO is approximately equal to 5-10 mg of morphine PO. |
| T | F | 19. If the source of the patient's pain is unknown, opioids should not be used during the pain evaluation period, as this could mask the ability to correctly diagnose the cause of pain. |
| T | F | 20. Anticonvulsant drugs such as gabapentin (Neurontin) produce optimal pain relief after a single dose. |
| T | F | 21. Benzodiazepines are not effective pain relievers unless the pain is due to muscle spasm. |
| T | F | 22. <u>Narcotic/opioid addiction</u> is defined as a chronic neurobiologic disease, characterized by behaviors that include one or more of the following: impaired control over drug use, compulsive use, continued use despite harm, and craving. |

Multiple Choice – Place a check by the correct answer.

23. The recommended route of administration of opioid analgesics for patients with persistent cancer-related pain is
_____ a. intravenous
_____ b. intramuscular
_____ c. subcutaneous
_____ d. oral
_____ e. rectal
24. The recommended route administration of opioid analgesics for patients with brief, severe pain of sudden onset such as trauma or postoperative pain is
_____ a. intravenous
_____ b. intramuscular
_____ c. subcutaneous
_____ d. oral
_____ e. rectal
25. Which of the following analgesic medications is considered the drug of choice for the treatment of prolonged moderate to severe pain for cancer patients?
_____ a. codeine
_____ b. morphine
_____ c. meperidine
_____ d. tramadol
26. Which of the following IV doses of morphine administered over a 4 hour period would be equivalent to 30 mg of oral morphine given q 4 hours?
_____ a. Morphine 5 mg IV
_____ b. Morphine 10 mg IV
_____ c. Morphine 30 mg IV
_____ d. Morphine 60 mg IV
27. Analgesics for post-operative pain should initially be given
_____ a. around the clock on a fixed schedule
_____ b. only when the patient asks for the medication
_____ c. only when the nurse determines that the patient has moderate or greater discomfort
28. A patient with persistent cancer pain has been receiving daily opioid analgesics for 2 months. Yesterday the patient was receiving morphine 200 mg/hour intravenously. Today he has been receiving 250 mg/hour intravenously. The likelihood of the patient developing clinically significant respiratory depression in the absence of new comorbidity is
_____ a. less than 1%
_____ b. 1-10%
_____ c. 11-20%
_____ d. 21-40%
_____ e. > 41%
29. The most likely reason a patient with pain would request increased doses of pain medication is
_____ a. The patient is experiencing increased pain.
_____ b. The patient is experiencing increased anxiety or depression.
_____ c. The patient is requesting more staff attention.
_____ d. The patient's requests are related to addiction.
30. Which of the following is useful for treatment of cancer pain?
_____ a. Ibuprofen (Motrin)
_____ b. Hydromorphone (Dilaudid)
_____ c. Gabapentin (Neurontin)
_____ d. All of the above

38. Patient B: Robert is 25 years old and this is his first day following abdominal surgery. As you enter his room, he is lying quietly in bed and grimaces as he turns in bed. Your assessment reveals the following information: BP = 120/80; HR = 80; R = 18; on a scale of 0 to 10 (0 = no pain/discomfort, 10 = worst pain/discomfort) he rates his pain as 8.

A. On the patient's record you must mark his pain on the scale below. Circle the number that represents your assessment of Robert's pain:

0 1 2 3 4 5 6 7 8 9 10

No pain/discomfort

Worst
Pain/discomfort

B. Your assessment, above, is made two hours after he received morphine 2 mg IV. Half hourly pain ratings following the injection ranged from 6 to 8 and he had no clinically significant respiratory depression, sedation, or other untoward side effects. He has identified 2/10 as an acceptable level of pain relief. His physician's order for analgesia is "morphine IV 1-3 mg q1h PRN pain relief." Check the action you will take at this time:

- 1. Administer no morphine at this time.
- 2. Administer morphine 1 mg IV now.
- 3. Administer morphine 2 mg IV now.
- 4. Administer morphine 3 mg IV now.

Answer Key

Knowledge and Attitudes Survey Regarding Pain

True/False – Circle the correct answer.

- F** 1. Vital signs are always reliable indicators of the intensity of a patient's pain.
- F** 2. Because their nervous system is underdeveloped, children under two years of age have decreased pain sensitivity and limited memory of painful experiences.
- F** 3. Patients who can be distracted from pain usually do not have severe pain.
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- T** 6. Respiratory depression rarely occurs in patients who have been receiving stable doses of opioids over a period of months.
- T** 7. Combining analgesics that work by different mechanisms (e.g., combining an opioid with an NSAID) may result in better pain control with fewer side effects than using a single analgesic agent.
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- F** 10. Opioids should not be used in patients with a history of substance abuse.
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