Controlling Pain Vignettes

January, 1998

Dear Colleague:

Thank you for your interest in our research published in Nursing 91 and Nursing 92 regarding decision making and pain management. We are forwarding a copy of four pain-control vignettes for your use along with reliability/validity information and a bibliography.

The first case vignette (Andy and Bob) is used to illustrate the impact of patient behaviors on nurses' assessments of pain. The results of this vignette were published in the June issue of Nursing 91. The second case vignette (Edward and Frank) is used to identify the impact of the younger patient's age on nursing judgements by comparing a younger adult and an older adult. This vignette is featured in an article published in the September issue of Nursing 91. The third vignette (Eric and Cory) reported in the January issue of Nursing 92, is related to the influence of vital signs on nurses' judgement concerning pain. The fourth vignette (Ben and Mike) explores the effect of the patient's lifestyle on nursing assessment and analgesic choice. This was published in the April issue of Nursing 92.

You may reproduce the surveys for your use. We always welcome feedback on your experiences. Please contact us if we can be of further assistance.

Sincerely,

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

Margo McCaffery, RN, MS, FAAN
Consultant and Lecturer
Reliability and Validity of the Pain Vignettes

Betty R. Ferrell & Margo McCaffery

Several individuals have inquired about the psychometrics of the case vignettes used in the research by McCaffery and Ferrell and reported in Nursing 91 and Nursing 92. The following is a summary of the methods used in establishing the reliability and validity of the tools.

The case vignettes consist of a brief case presentation of two patients designed to illustrate one concept in the treatment of pain. Concepts have included variables such as patient age, pain behaviors, gender lifestyle, and patient vital signs. Subjects are asked to respond to the three questions following each case presentation. The questions ask the subject to 1) rate the patient's pain; 2) select a dose of medication to administer from a range of doses; and 3) identify concerns that influenced their responses to the prior questions. The vignette, therefore, uses a case study method to obtain information about pain assessment, medication choices, and areas of knowledge and belief that influence nurses' choices. This approach was selected after the investigators had conducted several previous studies using more traditional multiple choice or true-false formats. The investigators believed that a case study approach might provide a more valid measure of nurses' actual decision.

Validity is first established by a review of the vignette by content experts in pain management. These experts provide feedback regarding the content clarity and affirm that the case is constructed to measure the targeted concept (content validity). Each vignette is then pilot tested in at least 100 subjects. The investigator (McCaffery) uses workshop participants to pilot the vignette and allows for group discussion in which the participants validate the concept measured and any issues regarding wording of the case. These pilot tests have been a valuable step in formulating the final case.

The vignettes are very brief and therefore certain psychometric measures such as test-retest reliability are not possible. The investigators have based the three questions following the vignettes on prior pain instruments with established reliability and validity (Ferrell, McGuire & Donovan 1991). This testing has included use in contrasting groups (construct validity) and test-retest reliability. A Bibliography is attached with reference regarding other studies by the investigators related to this topic.
Bibliography


5. Margo McCaffery and Betty R. Ferrell. Do you know a narcotic when you see one? Nursing 90, June 1990, 62-63.


Patient Behavior Vignettes
Two patients are presented. For each patient you are asked to make decisions about pain and medication.

**Patient A:**
Andy is 25 years old and this is his second day following abdominal surgery. As you enter his room to check his vital signs, he smiles at you and continues talking and joking with his visitor. Your assessment reveals the following information: BP=120/80; HR=80; R=18; on a scale of 0 to 5 (0 = no pain/discomfort, 5 = worst pain/discomfort) Andy rates his pain as 4 at the surgical site.

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

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0  1  2  3  4  5
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no pain/discomfort  Worst pain/discomfort
---------------------------------------------

2. Your assessment, above, is made four hours after Andy received morphine 10 mg IM. During the 3 hours following the injection, Andy's pain ratings ranged from 3 to 4 and he had no clinically significant respiratory depression, sedation, or other untoward side effects. His physician's order for analgesia is Amorphine IM 5 to 15 mg q3-4h PRN pain relief. Check the action you will take at this time:
   ___a) Administer no morphine at this time.
   ___b) Administer morphine 5 mg IM now.
c) Administer morphine 10 mg IM now.
d) Administer morphine 15 mg IM now.

3. Is your medication choice, above, determined by your concern that any of the following are likely to occur in this particular patient? Check all that apply.
a) respiratory depression
b) addiction (psychological dependence)
c) tolerance to analgesia
d) physical dependence (withdrawal)
e) other; specify ____________________________
f) none of the above are major concerns

Patient B:
Bob is 25 years old and this is his second day following abdominal surgery. As you enter his room to check his vital signs, he is lying quietly in bed and grimaces as he turns in bed. Your assessment yields the following information: BP = 120/80; HR = 80; R = 18; on a scale of 0 to 5 (0 = no pain/discomfort, 5 = worst pain/discomfort) Bob rates his pain as 4 at the surgical site.

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

   0 1 2 3 4 5
   ----------------------------------------------------------
   no pain/discomfort  Worst pain/discomfort

2. Your assessment, above, is made four hours after Bob received morphine 10 mg IM. During the 3 hours following the injection, Bob's pain ratings ranged from 3 to 4, and he had no clinically significant respiratory depression, sedation, or other untoward side effects. His physician's order for analgesia is Amorphine IM 5 to 15 mg q3-4h PRN pain relief. Check the action you will take at this time:
a) Administer no morphine at this time.
b) Administer morphine 5 mg IM now.
c) Administer morphine 10 mg IM now.
d) Administer morphine 15 mg IM now.

3. Is your medication choice, above, determined by your concern that any of the following are likely to occur in this particular patient? Check all that apply.
a) respiratory depression
b) addiction (psychological dependence)
c) tolerance to analgesia
d) physical dependence (withdrawal)
e) other; specify ____________________________
f) none of the above are major concerns

Thank you very much for participating in this survey. Your completion of this survey will be regarded as your informed consent. Please feel free to write any comments you may have.
Patient Age Vignettes
Two patients are presented. For each patient you are asked to make decisions about pain and medication.

**Patient A:**
Edward is 30 years old and has been hospitalized following a fractured hip sustained in a skiing accident two days ago. Your assessment yields the following information: no history of allergies or chronic illness; receiving vitamins and diet supplements; weight = 165; BP=120/80; HR=80; R=18; on a scale of 0 to 5 (0 = no pain/discomfort, 5 = worst pain/discomfort), Edward rates his pain as 4.

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

   0 1 2 3 4 5

   ---------------------------------------------

   No pain/discomfort  Worst pain/discomfort

2. Your assessment, above, is made four hours after Edward received morphine 10 mg IM. During the 3 hours following the injection, Edward's pain ratings ranged from 3 to 4 and he had no clinically significant respiratory depression, sedation, or other untoward side effects. His physician's order for analgesia is Amorphine IM 5 to 15 mg q3-4h PRN pain relief. Check the action you will take at this time:
   ___a) Administer no morphine at this time.
   ___b) Administer morphine 5 mg IM now.
c) Administer morphine 10 mg IM now.

d) Administer morphine 15 mg IM now.

3. Is your medication choice, above, determined by your concern that any of the following are likely to occur in this particular patient? Check all that apply.
a) respiratory depression
b) addiction (psychological dependence)
c) tolerance to analgesia
d) physical dependence (withdrawal)
e) other; specify ____________________________
f) none of the above are major concerns

Patient B:
Frank is 75 years old and has been hospitalized following a fractured hip sustained in a fall two days ago. Your assessment yields the following information: history of arthritis and hypertension, receiving antihypertensive and anti-inflammatory medications; weight 150; BP = 150/90; HR = 80; R = 18; on a scale of 0 to 5 (0=no pain/discomfort, 5 = worst pain/discomfort) Frank rates his hip pain as 4.

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

0 1 2 3 4 5

---------------------------------
No pain/discomfort Worst pain/discomfort

2. Your assessment, above, is made four hours after Frank received morphine 10 mg IM. During the 3 hours following the injection, Frank's pain ratings ranged from 3 to 4, and he had no clinically significant respiratory depression, sedation, or other untoward side effects. His physician's order for analgesia is Amorphine IM 5 to 15 mg q3-4h PRN pain relief. Check the action you will take at this time:
a) Administer no morphine at this time.
b) Administer morphine 5 mg IM now.
c) Administer morphine 10 mg IM now.
d) Administer morphine 15 mg IM now.

3. Is your medication choice, above, determined by your concern that any of the following are likely to occur in this particular patient? Check all that apply.
a) respiratory depression
b) addiction (psychological dependence)
c) tolerance to analgesia
d) physical dependence (withdrawal)
e) other; specify ____________________________
f) none of the above are major concerns
Thank you very much for participating in this survey. Your completion of this survey will be regarded as your informed consent. Please feel free to write any comments you may have.
Patient Vital Signs Vignettes
Survey - Optional - Anonymous

• General information about You •

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Years experience as health professional: _____ Age: _____

Patients

Patient A:

Eric is 40 years old and this is his second day following abdominal surgery. Your assessment reveals the following information: BP=140/86; HR=90; R=22; on a scale of 0 to 5 (0 = no pain/discomfort, 5 = worst pain/discomfort) Eric rates his pain as 4 at the surgical site.

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

0 1 2 3 4 5

----------------------------------------------------------
No pain/discomfort Worst pain/discomfort

2. Your assessment, above, is made four hours after Eric received morphine 10 mg IM. During the 3 hours following the injection, Eric's pain ratings ranged from 3 to 4 and he had no clinically significant respiratory depression, sedation, or other untoward side effects. His physician's order for analgesia is Amorphine IM 5 to 15 mg q3-4h PRN pain relief. @ Check the action you will take at this time:

___a) Administer no morphine at this time.
___b) Administer morphine 5 mg IM now.
___c) Administer morphine 10 mg IM now.
___d) Administer morphine 15 mg IM now.
3. Is your medication choice, above, determined by your concern that any of the following are likely to occur in this particular patient? Check all that apply.

___a) respiratory depression
___b) addiction (psychological dependence)
___c) tolerance to analgesia
___d) physical dependence (withdrawal)
___e) other; specify ____________________________
___f) none of the above are major concerns

Patient B:
Cory is 40 years old and this is his second day following abdominal surgery. Your assessment yields the following information: BP = 120/80; HR = 70; R = 14; on a scale of 0 to 5 (0 = no pain/discomfort, 5 = worst pain/discomfort) Cory rates his pain as 4 at the surgical site.

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

0 1 2 3 4 5

----------------------------------------------------------
No pain/discomfort Worst pain/discomfort

2. Your assessment, above, is made four hours after Cory received morphine 10 mg IM. During the 3 hours following the injection, Cory's pain ratings ranged from 3 to 4, and he had no clinically significant respiratory depression, sedation, or other untoward side effects. His physician's order for analgesia is Amorphine IM 5 to 15 mg q3-4h PRN pain relief.® Check the action you will take at this time:

___a) Administer no morphine at this time.
___b) Administer morphine 5 mg IM now.
___c) Administer morphine 10 mg IM now.
___d) Administer morphine 15 mg IM now.

3. Is your medication choice, above, determined by your concern that any of the following are likely to occur in this particular patient? Check all that apply.

___a) respiratory depression
___b) addiction (psychological dependence)
___c) tolerance to analgesia
___d) physical dependence (withdrawal)
___e) other; specify ____________________________
___f) none of the above are major concerns

Thank you very much for participating in this survey. Your completion of this survey will be regarded as your informed consent. Please feel free to write any comments you may have.
Life Style Vignettes
Survey - Optional - Anonymous

• General information about You •

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|                     |                   |                  | OR            |
|                     |                   |                  | OB/GYN        |
|                     |                   |                  | Other         |

Years experience as health professional: _____  Age: _____

Directions: We are interested in how you think your colleagues, the nurses you work with, assess and treat pain. Please answer the following questions in terms of what you believe most nurses you work with, or worked with recently, would do.

Patient A: This is Ben's seventh hospital day following admission for fractures and lacerations sustained in a motorcycle accident. Upon admission his blood alcohol concentration was 0.05%. He admits to drinking prior to the accident but denies drug abuse. He is 32 years old, single, is an unemployed construction worker, and lives with three unemployed roommates. Two roommates are visiting now.

Assessment yields the following information: BP=120/80; HR=80; R=18; on a scale of 0 to 5 (0 = no pain/discomfort, 5 = worst pain/discomfort) Ben rates his overall pain as 4.

1. On the patient's record you must mark Ben's pain on the scale below. Circle the number that represents you think most nurses.

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<tr>
<td>No pain/discomfort</td>
<td>Worst pain/discomfort</td>
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</table>
2. The above assessment of Ben is made four hours after Ben received morphine 10 mg IM. During the 3 hours following morphine 10 mg IM, Ben's pain ratings ranged from 3 to 4 and his pain rating after 4 hours was 4. He had no clinically significant respiratory depression, sedation, or other untoward side effects. His physician's order for analgesia Amorphine IM 5 to 15 mg q3-4h PRN pain relief. Check the action you think most nurses would take at this time:
___a) Administer no morphine at this time.
___b) Administer morphine 5 mg IM now.
___c) Administer morphine 10 mg IM now.
___d) Administer morphine 15 mg IM now.

3. Would the nurse's medication choice, above, be determined by your concern that any of the following are likely to occur in this particular patient? Check all that apply.
___a) respiratory depression
___b) addiction (psychological dependence)
___c) tolerance to analgesia
___d) physical dependence (withdrawal)
___e) other; specify ____________________________
___f) none of the above are major concerns

Patient B:
Mike is 30 years old and this is his seventh hospital day following admission for fractures and lacerations sustained in an automobile accident. He is a business man, and is married with one child. His wife is visiting now.
Assessment yields the following information: BP = 120/80; HR = 80; R = 18; on a scale of 0 to 5 (0 = no pain/discomfort, 5 = worst pain/discomfort) Mike rates his overall pain as 4.

1. On the patient's record the nurse must mark Mike's pain on the scale below. Circle the number that represents your assessment of Mike's pain:

0 1 2 3 4 5
------------------------------------------
No pain/discomfort Worst pain/discomfort

2. The above assessment is made four hours after Mike received morphine 10 mg IM. During the 3 hours following the morphine 10 mg IM, Mike's pain ratings ranged from 3 to 4, and his pain rating after 4 hours was 4. He had no clinically significant respiratory depression, sedation, or other untoward side effects. His physician's order for analgesia is Amorphine IM 5 to 15 mg q3-4h PRN pain relief. Check the action you think most nurses would take at this time:
___a) Administer no morphine at this time.
___b) Administer morphine 5 mg IM now.
___c) Administer morphine 10 mg IM now.
___d) Administer morphine 15 mg IM now.

3. Would the nurse's medication choice, above, be determined by your concern that any of the following are likely to occur in this particular patient? Check all that apply.
___a) respiratory depression
___b) addiction (psychological dependence
___c) tolerance to analgesia
___d) physical dependence (withdrawal)
___e) other; specify ____________________________
___f) none of the above are major concerns

Please feel free to write any comments you may have, e.g. reasons your colleagues would have made the above decisions about the patients.
Thank you very much for participating in this survey. Your completion of this survey will be regarded as your informed consent. Please feel free to write any comments you may have.