

Controlling Pain Vignettes

January, 1998

Dear Colleague:

Thank you for your interest in our research published in <u>Nursing 91</u> and <u>Nursing 92</u> 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

By R Ferry MO, FAAN

Margo McCaffery, RN, MS, FAAN Consultant and Lecturer

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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 <u>Nursing 91</u> and <u>Nursing 92</u>. 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 the tree 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 form 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

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- 12. Margo McCaffery, Betty R. Ferrell, Edith O'Neil Page, Margaret Lester, and Bruce Ferrell. Nurses' knowledge of opioid analgesic drugs and psychological dependence. <u>Cancer Nursing</u>, 1990, 13(1), 21-27.
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Survey - Optional - Anonymous • General information about You •

Professional discipline:NursingPharmacyMedicinePhysical TherapySocial WorkOther Specify	Highest education: _Student _LPN _AD _Diploma _Bachelors _Masters _Doctorate	Practice setting: _Hospital _Home/community _Hospice _Office _Other Specify	Clinical area: _Medical _Postop/SurgOncology _Geriatrics _Pediatrics _Orthopedics _ICU/CCU _ER _OR _OB/GYN _Other Specify
Years experience as h	ealth professional:	<u>Age</u> :	1
	• Dir	rections •	
medication. Patient A: Andy is 25 years old a room to check his vita Your assessment reveto 5 (0 = no pain/discosite. 1. On the patient	and this is his second day all signs, he smiles at you als the following information omfort, 5 = worst pain/dis	following abdominal sur and continues talking and ation: BP=120/80; HR=80 scomfort) Andy rates his his pain on the scale belo	rgery. As you enter his d joking with his visitor. 0; R=18; on a scale of 0 pain as 4 at the surgical
0 1 2	3 4 5		
no pain/discomformt	Worst pain/discon	nfort	
During the 3 h had no clinical effects. His ph relief.@ Checka) Administer no r	ours following the inject ly significant respiratory	nours after Andy received ion, Andy's pain ratings r depression, sedation, or esia is Amorphine IM 5 to at this time:	anged from 3 to 4 and he other untoward side

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
<u>Patient B</u> : 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.
 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: 1 2 3 4 5
no pain/discomformt Worst pain/discomfort
 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)
d) physical dependence (withdrawal)e) other; specifyf) 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.



Survey - Optional – Anonymous

• General information about You •

Professional discipline:	Highest education:	Practice setting:	Clinical area:	
Nursing	Student	_Hospital	Medical	
_Pharmacy	LPN	_Home/community	_Postop/Surg.	
Medicine	AD	_Hospice	_Oncology	
Physical Therapy	Diploma	_Office	Geriatrics	
Social Work	Bachelors	Other	Pediatrics	
Other	Masters	Specify	Orthopedics	
Specify	Doctorate	speeny	ICU/CCU	
Speeny	Boctofate		ER	
			OR	
			OB/GYN	
			Other	
			Specify	
Years experience as hea	alth professional:	<u>Age</u> :	~p************************************	
accident two days ago. Yor chronic illness; receiv R=18; on a scale of 0 to pain as 4. On the patient's a	Your assessment yields to ving vitamins and diet sugar 5 (0 = no pain/discomfo	ed following a fractured he the following information upplements; weight = 165 ort, 5 = worst pain/discort is pain on the scale below pain	n: no history of allergies 5; BP=120/80; HR=80; nfort), Edward rates his	
0 1 2	3 4 5			
No pain/discomfort	Worst pain/discomfort			
 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. 				

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.

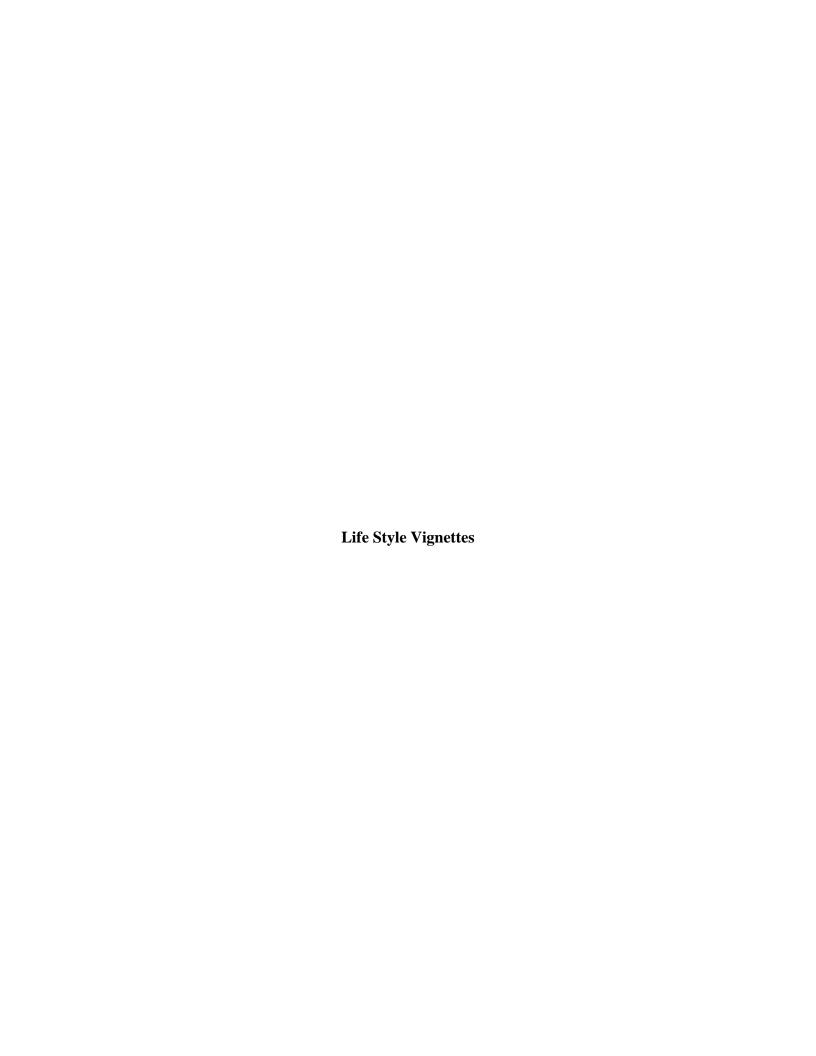


Survey - Optional - Anonymous • General information about You •

discip _Nur _Pha _Med _Phy _Soc _Oth _Spe	rsing rmacy dicine rsical Therapy ial Work er cify	Highest education: _Student _LPN _AD _Diploma _Bachelors _Masters _Doctorate	Practice setting: _Hospital _Home/community _Hospice _Office _Other _Specify	Clinical area: _Medical _Postop/SurgOncology _Geriatrics _Pediatrics _Orthopedics _ICU/CCU _ER _OR _OB/GYN _Other Specify
<u>rears</u>	experience as near	th professional:	<u>Age</u> :	
		Pat	ients	
Patient	<u>A</u> :			
 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. 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	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:				

b) c) d)	are like respirate addiction tolerand physica	tely to of tory dep on (psychete to and al depen	ccur in the ression chological algesia dence (with the control of	is parti I depen ithdrav	icular pati	mined by your concern that any of the following lent? Check all that apply.
yields	is 40 yes the foll	owing i	nformatio	n: BP	= 120/80;	following abdominal surgery. Your assessment $R = 70$; $R = 14$; on a scale of 0 to 5 (0 = no ory rates his pain as 4 at the surgical site.
1.					ust mark l Cory's pa	nis pain on the scale below. Circle the number that ain:
0			3			
No pa			Worst		liscomfort	. <u>-</u>
b)	Durin had no effects relief. Admin Admin	g the 3 h o clinica s. His ph @ Chec ister no ister mo	nours folle lly signifi nysician's	owing icant recorder to order to on you at this mg IM one IM	the injective spiratory for analge will take stime. In now.	nours after Cory received morphine 10 mg IM. ion, Cory's pain ratings ranged from 3 to 4, and he depression, sedation, or other untoward side esia is Amorphine IM 5 to 15 mg q3-4h PRN pain at this time:
b) c) d)	are like respirate addiction tolerand physica	tely to octory depoin (psycon and dependent)	ccur in th ression chological	is parti I depen ithdrav	icular pati ndence) val)	mined by your concern that any of the following tent? Check all that apply.

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.



Survey - Optional - Anonymous

• General information about You •

Professional discipline:	Highest education:	Practice setting:	Clinical area:
NursingPharmacyMedicinePhysical TherapySocial WorkOther Specify	_Student _LPN _AD _Diploma _Bachelors _Masters _Doctorate	_Hospital _Home/community _Hospice _Office _Other Specify	MedicalPostop/SurgOncologyGeriatricsPediatricsOrthopedicsICU/CCUEROROB/GYNOther Specify
Directions: We are assess and treat pain nurses you work with Patient A: This is Besustained in a motor He admits to drinking	Please answer the follow h, or worked with recently on's seventh hospital day for cycle accident. Upon adm g prior to the accident but	Age: ak your colleagues, the nurving questions in terms of y, would do. Collowing admission for fractission his blood alcohol cot denies drug abuse. He is ith three unemployed room	rses you work with, what you believe most actures and lacerations oncentration was 0.05%. 32 years old, single, is ar
no pain/discomfor On the patier	t, 5 = worst pain/discomfo	BP=120/80; HR=80; R=1 ort) Ben rates his overall p Ben's pain on the scale be	ain as 4.
0 1 2	3 4 5		
No pain/discomfort	Worst pain/discomfor	rt	

b) c)	 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. 					
b) c) d) e)						
lacera child. Asses	is 30 ye tions su His wif sment y	stained e is visi ields the	in an auto ting now e followin	omobil ng info	e accident.	ital day following admission for fractures and He is a business man, and is married with one P = 120/80; HR = 80; R = 18; on a scale of 0 to 5 ort) Mike rates his overall pain as 4.
1.		-				ark Mike's pain on the scale below. Circle the of Mike's pain:
0	1	2	3	4	5	
No pa	in/disco	omfort	Worst	t pain/d	liscomfort	
 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.