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## Pain Management: Nurse's Knowledge and Factors Influencing Pain Medication Administration

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## Introduction

Effective pain management continues to be a complaint of hospitalized patients despite the emphasis on the patient's right to appropriate pain management and the increased awareness of the detrimental effects of pain that is inadequately treated and managed.



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## Introduction

- Pain management is a vital concept that is discussed in nursing throughout all nursing courses and many continuing education programs.
- Prejudices persist among nurses regarding patient complaints of pain and the need for pharmacological interventions.
- Increased awareness of pain related issues in the public press and many healthcare governing agencies.



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## Clinical Experiences

- Patient 3 days post-op total hip replacement not medicated for pain for >24 hours. Patient stated "It only hurts when I move."
- Patient admitted to orthopedic unit post fall with fractured femur and radius. No pain medication for >12 hours. Patient stated "It only hurts when I move."



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## Clinical Experiences

- Patient in ICU on mechanical ventilator post-op major abdominal surgery. When the nurse was asked when the last pain medication had been given, the nurse responded that the patient was receiving continuous infusion of propofol (Diprivan).



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## Purpose

This study was conducted to investigate professional nurses' knowledge and personal attitudes towards pain management in a small urban community hospital.


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### Methods

- Ferrell and McCaffrey's Nurses Knowledge and Attitude Survey Regarding Pain (1997) which has a test-retest reliability greater than .80 and internal reliability greater than .70 was used for the study. The survey was modified to exclude questions regarding cancer and pediatric pain issues.

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### Methods

- Additional questions, for a total of 48 questions, were included to identify factors that may influence the nurse's response to a patient's complaint of pain.
- The additional questions were reviewed for content validity by an advanced practice nurse with an expertise in pain management.

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### Results

- Nursing Units involved: a 24 bed combined medical-surgical critical care unit and a 54 bed primarily orthopedic medical-surgical unit.
- Response rate: 105 nurses were eligible for the study and 81 (77%) returned the completed survey questionnaire.

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### Results

- Seventy-two (89%) of the respondents were female.
- The scores on the Nurses Knowledge and Attitude Survey ranged from 39-94% (67.6 ± 11.33; Mode 71%).
- Forty-three (53.1%) had attended a pain assessment class.

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### Results: Demographics

Education Level	Frequency	Percent
Not indicated	5	6.2
LPN	5	6.2
Diploma	7	8.6
ADN	27	33.3
BSN	33	40.7
MS	3	3.7
Doctorate	1	1.2

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### Results: Demographics

Age (Years)	Frequency	Percent
20 – 25	4	4.9
26 – 30	4	4.9
31 – 35	16	19.8
36 – 40	20	24.7
41 – 45	17	21
46 – 50	8	9.9
51 – 55	5	6.2
56 – 60	2	2.5

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### Results: Demographics

Years in Nursing	Frequency	Percent
1 – 5	34	42
6 – 10	11	13.6
11 – 15	15	18.5
16 – 20	8	9.9
21 – 25	5	6.2
26 – 30	3	3.7
31 – 35	3	3.7
36 – 40	1	1.2

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### Results: Influencing Factors in Pain Management

- Does culture and gender affect the reporting of pain by a patient?
  - Yes 71 (87.7%)
  - No 5 (6.2%)
  - Maybe 3 (3.7%)
  - Don't know 2 (2.5%)

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### Results: Influencing Factors in Pain Management

- Does your cultural background affect your nursing care of a patient's report of pain?
  - Never 55 (67.9%)
  - Sometimes 25 (30.9%)
  - Always 1 (1.2%)

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### Results: Influencing Factors in Pain Management

- Does your visual assessment of the patient reporting pain influence your response and treatment of the pain?
  - Never 16 (19.8%)
  - Sometimes 59 (72.8%)
  - Always 6 (7.4%)

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### Results: Influencing Factors in Pain Management

- Does the medical diagnosis of the patient affect your response to the report of pain and request for medication?
  - Never 25 (45%)
  - Sometimes 45 (55.6%)
  - Always 10 (12.3%)

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### Results: Influencing Factors in Pain Management

- Does the patient who frequently requests pain medication affect your response time to pain medication administration?
  - Never 36 (44.4%)
  - Sometimes 44 (54.3%)
  - Always 1 (1.2%)

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### Discussion

- A similar study had been performed in 2001 utilizing the Ferrell and McCaffrey's Nurses Knowledge and Attitude Survey Regarding Pain (1997). Based upon those results educational emails were sent to the licensed nursing staff to increase pain assessment knowledge. This study identified the need for additional education regarding pain management.

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### Discussion

- The majority of the sample respondents (42%) have less than 5 years experience in nursing and may lack expertise in:
  - Pain management techniques
  - Proactive pain management
  - Understanding of disease process and resulting issues
  - Being a patient advocate for pain management

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### Discussion

- Educational needs regarding pain management persist despite the national focus on pain management and the recognized adverse affects of unrelieved pain.
- The high response rate was most likely related to the token of appreciation given and the possibility of a \$50.00 gift certificate.
- This was the first nursing research project under taken at the hospital.

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### Recommendations

- Acknowledging and aggressively treating patient's complaints of pain, the importance of pain reassessment, and the incorporation of alterative pain management modalities needs to be the focus of continued professional education of nurses.
- Repeat the Ferrell and McCaffrey's Nurses Knowledge and Attitude Survey Regarding Pain (1997) after professional education regarding pain management.

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### Limitations

- The major limitation of this study was that it was limited to the nursing staff of a 24 bed combined medical-surgical critical care unit and a 54 bed primarily orthopedic medical-surgical unit which eliminated Oncology, Telemetry, and Emergency services.
- The questions should have been added about being proactive versus reactive in pain management to a ascertain nurse's belief regarding pain medication administration.

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### Future Research

- Interview patients regarding satisfaction with pain management interventions.
- Interview patients regarding pain management effectiveness with the use of patient controlled analgesia (PCA).
- Review of medical records for nursing documentation of pain assessment and it's re-evaluation.

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