

The Knowledge and Attitudes Regarding Pain Management among the Medical Nursing Staff in Hong Kong

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Background

- Pain affects most of the hospitalized patients continuously (Yates et al., 1998).
 - Pain was common in hospitalized medical patients and 18% of them reported that their pain was inadequately controlled (Whelan, Jin & Meltzer, 2004).
 - 70.1% of the hospitalized patients with medical illness experienced nonprocedural pain on presentation or in the hospital (Gu & Belgrade, 1993).
- Although the physicians are accountable for prescribing analgesia, much of the responsibility for the comfort of patients rests with the nurses. (Cohen, 1980)
- Nurses should have a **solid foundation of pain knowledge** and develop a **correct attitude** towards pain management.



Purpose of the study

- To explore the current knowledge and attitudes regarding pain management of the medical nursing staff in Hong Kong.

Methodology 1

- **Design:-** A descriptive and cross-sectional study.
- **Setting:-** The data were collected in all medical wards in a local public hospital.
- **Sampling:-**
 - Inclusion criteria:**

The target population was the medical nursing staff who were those:

 - obtained the practicing license issued by the Nursing Council of Hong Kong;
 - work in the medical units for at least 3 months continuously
 - able to read Chinese.
 - Total number of eligible subjects:** 233.
 - Response rate:** 61.4% (143 subjects were willing to participate in this study)

Methodology 2



Measurements:-

- A self-reported survey was used
- The survey was divided into 2 parts:
 - The Chinese version of the Nurses' Knowledge and Attitudes Survey Regarding Pain (NKASRP-Chinese version); and
 - Demographic data.

Methodology 3



Data collection procedures:-

- The study was approved by the Kowloon West Cluster Cluster Clinical Research Ethics Committee.
- The data collection period: Dec 2005 - Jan 2006.
- A set of documents include an information sheet, the consent form, the questionnaire have been delivered to each eligible subject.
- For those who were interested in participating in the study, they were required to sign the consent form, fill in the questionnaire, and placed it in a large portfolio with a sealed envelop.

Results 1. Demographics and Education information of the 143 subjects in the study

Characteristics	M(SD)	Range
Years of experience	5.79(4.03)	1-21
Estimated no. of lecture hours regarding pain management in the Bachelor/diploma nursing program	4.59(3.88)	0-24

Characteristics	n	%
Frequency of using objective tools while assessing pain		
Never	34	23.8
Seldom	79	55.2
Often	29	20.3
Every time	1	0.7

	n	%
Gender		
Male	26	18.2
Female	117	81.8
Rank		
EN	4	2.8
RN	133	93.0
NO	4	2.8
APN	2	1.4
Educational Level		
Certificate	4	2.8
High Diploma	21	14.7
Bachelor's Degree	115	80.4
Master's Degree	3	2.1
Place of attaining the qualification in nursing		
HKU	3	2.2
CU	5	3.6
PolyU	23	16.7
OpenU	18	13.0
Others*	89	64.5
Attend any course related to pain management		
No	116	81.1
Yes	27	18.9
Course with attending certificate	10	40
Workshop	15	60
Reading any books or journals about pain		
No	43	30.3
Yes	99	69.7
Application of knowledge gained from books/journals into daily work		
No	35	35
Yes	65	65

*Others: University of Western Sydney; Ballarat University; Monash University; YCH Nursing School

Results 2. Descriptive Statistics

Mean of the total correct score

	M(SD)	Range
Total score	9.49(2.62)	4-16

The number and percentage of incorrectly answered for each item (from item 1 to 16: T/F questions; from item 17 to 25: multiple choice) with ranking

Rank		n	%	
1	Item 23	141	98.6	(The percentage of patient who over-report the amount of pain they have)
2	Item 6	107	74.8	(Non-drug interventions are effective for mild-moderate pain control but not for severe pain)
3	Item 10	99	69.2	(Beyond certain dosage of morphine increases in dosage will not increase pain relief)
4	Item 17	97	67.6	(The recommended route of administration opioids to patients with prolonged cancer pain)
5	Item 1	92	64.8	(Changes in vital signs must be relied on to verify patient's statement of pain)
6	Item 16	92	64.4	(Heat and cold should only be applied to the painful area)
7	Item 15	92	64.3	(The patient should be advised to use non-drug techniques alone rather than use medications)
8	Item 24	91	63.4	(Scenario 1)
9	Item 9	88	61.5	(Patients with substance abuse should not be given opioids because of high risk of addiction)
10	Item 5	87	61.3	(Aspirin and nonsteroidal anti-inflammatory agents are not effective for bone pain due to metastases)
11	Item 7	83	58	(Respiratory depression rarely occurs in patients having several months opioids)
12	Item 19	86	57.8	(The equivalent dosage for 30mg oral morphine)
13	Item 18	80	55.9	(The recommended route of administration opioids to patients with sudden onset severe pain)
14	Item 3	73	51	(Patient may sleep in spite of severe pain)
15	Item 2	68	47.6	(Children<2 years old have decreased pain sensitivity and limited memory of painful experiences)
16	Item 21	65	45.5	(The time schedule for giving analgesic for chronic cancer pain patient)
17	Item 11	64	44.8	(Elderly patients cannot tolerate opioids for pain relief)
18	Item 25	62	43	(Scenario 2)
19	Item 8	61	42.7	(The WHO pain ladder suggests using single analgesics rather than combination drugs)
20	Item 20	60	42	(The time schedule for giving analgesic for post-operative pain patient)
21	Item 13	49	34.3	(The nurse should rely on the parents' assessment for children<11years old)
22	Item 12	42	28.9	(Patient should be encouraged to endure pain before resorting to a pain relief measure)
23	Item 22	41	28.7	(The most accurate judge of the intensity of patient's pain)
24	Item 4	38	26.6	(Stimuli in different people produce the same intensity of pain)
25	Item 14	20	13.4	(Dosage are adjusted in accordance with patient's response)

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Summary of the results

- 1. The knowledge level of pain management*
 - The **mean total correct score** was **low** (M=9.49, SD=2.62) with range from 4 to 16.
 - Nurses have inadequate knowledge about both pharmacological and non-pharmacological interventions for pain patients.
- 2. Discrepancy between attitudes towards pain management and practice*



Discussion 1

The knowledge level of pain management

- The knowledge level of the medical nurses was far from optimal and relatively low when compared with the nurses in overseas;
- Limited lecture hours on pain management in the curriculum of the nursing program;
- Inadequate pain management course in continuing nurse education;
- Pain assessment and use of objective tools are not integrated into nursing assessment chart.

Discussion 2

Attitudes towards pain management and discrepancy between attitudes and practice on pain management

- Compared to previous studies, the participants showed some improvements of attitudes toward pain management. They appreciated the uniqueness and subjectivity of pain.
- However, the participants relied on patients' facial expression, vital signs and ability of performing activity of daily living to assess patients' pain.
 - Limited assessment time
 - Shortage of nurses
 - Heavy workload
 - ↓ nurses and patients interaction
 - Rely on patients' initiation
 - Cultural factors
 - Medication have many side-effects that interrupt the balance of the whole body
 - Select non-pharmacological interventions
 - Myth of using opioids
 - use of opioids will lead to respiratory distress and drug dependence



Limitations

- Convenience sampling & small sample size
→ ↓ generalizability
- Factors such as cultural factors of using drugs and personal experience towards pain have not been examined

Recommendations



1. Increase sample size and multicenter
2. The reasons for not attending course about pain management.
3. In-depth interview to further explore the factors influencing the nurses' attitude towards pain management.
4. Review the curriculum better preparation of nursing students in pain knowledge and management
5. Organize in-services training to enhance nurse' competence on pain management
6. Integrate pain assessment and management into nursing practice
7. Develop protocol for pain management

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- Dr. Tse, M.M.Y.

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Thank you