

ORIGINAL ARTICLE

Survey of Nurses' Knowledge and Attitude Regarding Post Operative Pain Management at a Teaching Hospital in Malaysia

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ABSTRAK

Kesakitan selepas pembedahan selalunya dialami oleh pesakit dan menjejaskan pergerakan serta melambatkan penyembuhan. Kesakitan akut selepas pembedahan adalah subjektif dan tidak dapat dinilai secara langsung. Objektif kajian ini adalah untuk menilai tahap pengetahuan dan sikap jururawat terhadap pengurusan kesakitan selepas pembedahan. Kajian berbentuk keratan rentas ini dijalankan di wad surgikal dan unit rawatan rapi di Pusat Perubatan Universiti Kebangsaan Malaysia (PPUKM) bermula dari Februari hingga April 2008. Terdapat 28 soalan yang mengandungi dua konstruk iaitu pengetahuan dan sikap jururawat terhadap pengurusan kesakitan pesakit. Seramai 84 responden menyertai kajian ini. Hasil kajian menunjukkan 21 (25%) berpengetahuan tinggi, 58 (69%) responden mempunyai pengetahuan yang sederhana, dan hanya 5 (6%) responden berpengetahuan rendah terhadap pengurusan kesakitan selepas pembedahan. Seramai 66 responden (78.5%) menunjukkan sikap positif terhadap pengurusan kesakitan selepas pembedahan. Terdapat hubungan yang signifikan di antara sikap positif dan kelulusan akademik jururawat ($\chi^2 = 29.96$, $p < 0.05$). Kesimpulannya kajian ini menunjukkan jururawat di PPUKM mempunyai pengetahuan sederhana dan sikap yang positif terhadap pengurusan kesakitan selepas pembedahan. Hasil kajian ini menunjukkan keperluan pendidikan berterusan dalam pengurusan kesakitan di kalangan para jururawat di PPUKM bagi memperbaiki pengetahuan mereka dalam pengendalian kesakitan demi memperbaiki mutu jagaan selepas pembedahan.

Kata kunci: sikap, pengetahuan, jururawat, pengurusan kesakitan, pos-pembedahan

ABSTRACT

Post operative pain is an expected adverse outcome following surgery and it often delays mobilization and overall recovery. Acute post operative pain is subjective and cannot be measured directly. The objective of this study was to determine nurses' knowledge and attitude towards post operative pain management. A cross sectional study was conducted in surgical wards and the Intensive Care Unit of Universiti Kebangsaan Malaysia Medical Centre from February to April 2008. A 28 item

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questionnaire which comprised of two domains: knowledge and attitude towards post operative pain management was used. Eighty four respondents successfully responded to the study. Twenty respondents (25%) possessed high level, 58 respondents (69%) possessed moderate level and 5 respondents (6%) had low knowledge level of post operative pain management. Positive attitude towards post operative pain management was reported by 66 respondents (78.5%). There was a significant relationship between nurses' academic qualifications and attitude towards post operative pain management ($\chi^2 = 29.96$, $p < 0.05$). In conclusion, nurses in UKMMC possessed moderate level of knowledge and positive attitude towards post operative management. Results of this study show the need to enforce continuing medical education in pain management amongst UKMMC nurses in enhancing the quality of post operative care.

Key words: attitude, knowledge, nurse, pain management, post operative

INTRODUCTION

Post operative pain is an expected adverse outcome following surgery and it often delays mobilization and overall recovery (Bodian et al. 2001; Clarke et al. 1996). Moderate to severe post operative pain is unpleasant but treatable. Adequate level of knowledge and positive attitude are essential components in the delivery of post operative pain management (De Rond et al. 2000; Bowman, 1994). Ineffective pain management continues to be a complaint of hospitalized patients despite the emphasis laid 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 (Idvall et al. 2002; Howell et al. 2000).

Pain is defined by the American Pain Society Quality of Care Committee, as an unpleasant sensory and emotional experience associated with actual or potential tissue damage, or described by the patients in terms of such damage (Lin, 2001). According to McCaffery et al. (2002) the most accurate definition of pain is "Whatever the experiencing person says it is, existing whenever he says it does". This definition of pain has implications for registered nurses as they as-

sess pain. The patients experiencing pain only can describe the characteristic of their pain.

Insufficient education and training for nurses and patients were amongst the issues reported as poor post operative pain management (Dalton et al. 2001; De Rond et al. 1999). Although studies have shown that pain education programs increase nurses' knowledge and improve attitudes towards pain management, the management of post operative pain by nurses still remains a problem (Goodrich 2006; Elliot et al. 1996). Many nurses, are still relying on their personal opinion about patient's pain, rather than using their recorded assessment to assist them to choose appropriate opioid doses. Appropriate pain assessment tools are not utilized on a regular basis in acute care settings and this also contributes to under-treatment of pain (McCaffery et al. 2000; Clarke et al. 1996).

Pain management has been an integral part of nursing practice for many years, yet there are still too many who lack the basic knowledge necessary to manage pain appropriately (McCaffery et al. 2000; Puntilo et al. 1997). Further, unrelieved post operative pain may be harmful and adversely affect the quality of life amongst post operative patient (Howell et

al. 2000; Watt-Watson et al. 2000). This study was designed, therefore to determine nurses' knowledge and attitude towards post operative pain management at UKMMC. The data collected provides timely, and baseline information related to nurses' knowledge and attitudes towards post operative pain management at UKMMC. These data may be used as a foundation for comparisons in future research on pain management.

MATERIALS AND METHODS

A cross sectional study was conducted in three surgical wards and the Intensive Care Unit (ICU) of UKMMC from February to April 2008. A questionnaire of 28 items comprising two domains: knowledge and attitude towards post operative pain management was administered. It was adopted and modified from Mc Caffery et al. (1995). It was an objective assessment tool to measure the nurses' knowledge and attitude with regard to pain control. The first 18 questions were of the "true or false" type related to nurses' knowledge towards post operative pain management. The last ten questions delved into their attitude towards pain management. A Likert's scale ranging from 1 to 5 (1 indicating "strongly disagree" and 5 "strongly agree") was used. Questionnaires were translated to Bahasa Malaysia and translated back again. Ninety six sets of questionnaires were given to nurses in surgical ward one, two and three and intensive care unit (ICU) of UKMMC. There were 84 respondents who successfully responded to this study. Ethics approval was obtained from Universiti Kebangsaan Malaysia Ethic Committee (FF-040-2008) and permission was granted by the UKMMC director and nursing services.

RESULTS

The response rate of this study was 84 respondents (88%) completed the ques-

tionnaire while 12 respondents (12%) did not, despite being given the questionnaire. The socio-demographic data of respondents were as shown in Table 1.

Table 1: Respondents' socio-demographic data.

Variables	Respondent (%)
Age	
21- 29 years	78 (93%)
30- 40 years	5 (6%)
> 41 years	1 (1%)
Years of experience	
0-3 years	25 (30%)
4-7 year	26 (31%)
8-11 year	32 (38%)
>12 year	1 (1%)
Basic nursing training	
Ministry of Health	16 (19%)
Public Institute of Higher Learning	63 (75%)
Private nursing college	5 (6%)
Post basic course	
Yes	3 (4%)
No	81 (96%)
Academic achievement	
Diploma in Nursing	80 (95%)
Degree in Nursing	4 (5%)

Nurses' level of knowledge in post operative pain management

Results showed that 58 respondents (69%) reported to possess moderate level of knowledge towards post operative pain management; 21 respondents (25%) scored high level of knowledge and 5 respondents (6%) had low score of knowledge towards post operative pain management. Table 2, showed the rates of correct answers to questions related to knowledge in post operative management.

Nurses' attitude towards post operative pain management

Positive attitude towards post operative pain management was reported by 66 respondents (79%) while 18 respondents (21%) had poor or negative attitude. The

respondents' attitude towards post operative pain management questions correctly answered is shown in Table 3.

DISCUSSION

This study, which measured nurse's knowledge and attitude regarding post operative pain management, suggested that a knowledge deficit does exist. This is consistent with previous research findings (Idvall et al. 2002; De Rond et al. 2000; Coyne et al. 1999). In this study, 58 respondents (69%) scored moderate level of knowledge towards post operative pain management. This is higher than that reported by Cason et al. (1999) in which the same questions were answered

correctly by 63.64% of the respondents. Cason et al. (1999) also found that the nurses in their sample answered general questions about medications for pain better than specific pharmacologic questions about pain management. The findings in this study were in accordance with earlier findings by Watt-Watson et al. (2000), which showed that many nurses had an inaccurate knowledge base about common pharmacologic agents used in pain control. This inadequate knowledge base accounted for the possibility of under-treatment of patients' post operative pain.

The contribution of inadequate knowledge and nurse's negative attitudes towards the pain experience has been

Table 2: Table showing questions correctly answered by the respondents related to knowledge towards post operative pain management

Questions	n (%)
1. The goal of giving narcotic analgesic during the first 48 hours post operative is to relieve as much pain as possible.	82 (97)
2. The most accurate judge of the intensity of the patient's pain is patient himself/herself.	71 (84)
3. After the initial recommended dose of opioid analgesic, subsequent doses area adjusted in accordance with the individual patients' response.	70 (84)
4. Based on one's belief a patient may think that pain and suffering is necessary.	69 (81)
5. Midazolam (Dormicum) provides rapid pain relief.	55 (65)

Table 3: Table showing questions answered correctly by the respondents related to attitude towards post operative pain management

Questions	n (%)
1. If the patient can be distracted from his/her pain, this usually means that he/she does not have as high intensity of pain as he/she thinks.	74 (88)
2. Allowing patients to administer their own pain medication (e.g. PCA) is a superior way to provide analgesia.	64 (76)
3. I worry that a patient might become addicted to the analgesic I give.	60 (71)
4. Patients with a history of substance abuse should not be given opioids for pain relief.	52 (61)
5. The potency of pain relief measures selected for the patient should be determined based on the type of surgery rather than on the patient's report of pain intensity.	50 (59)

implicated in the nurses' inadequate management of patients in pain (Dalton et al. 2001; De Rond et al. 1999; Bownan, 1994). The findings of this study reported that pharmacologic interventions are a major area of concern. 69 respondents (81%) in the study acknowledged that patients might think that pain and sufferings are necessary, based on one's religious belief. This question demonstrated the perceived importance of religious upbringing and how this may impact upon one's personal opinion and feelings about pain and suffering.

In the Malaysian scenario, aggravating cultural values and beliefs affect many individuals who believed that pain is a challenge bestowed by God, thus one tends to tolerate the pain rather than reporting the intensity of pain to healthcare staff. Inability to tolerate pain causes one to loss face and self esteem and society may consider this person a coward. Nurses in this present study may expect patients to bear a certain amount of pain and suffering. Clarke et al. (1996) noted in their study that very few nurses felt strongly that patients can and should be maintained in a pain-free state. Majority of nurses would elect to reduce pain rather than to relieve it entirely. The findings from earlier studies are similar to those of the current study. Another possible explanation is the misconception involving the use of opioids. Brunier et al. (1995) found that 30% of the nurses surveyed falsely believed that 25% of the patients with pain will be addicted to opioids. Nurses may feel that some patients are pain medication seeking as a result of addiction.

There were significant differences found in nurses' academic qualifications and attitude towards post operative pain management. Results of this study are congruent with previous studies, which supported the idea that those with higher academic qualifications had better at-

titude scores (Goodrich 2006; McCaffery et al. 2000; Clarke et al. 1996). Several authors have reported that although nurses have become better informed over the years, there are many who still lack the basic knowledge on appropriate pain management (Watt-Watson et al. 2000; McCaffery et al. 1999; Punntillo et al. 1997).

CONCLUSION

We conclude that nurses in UKMMC possess moderate knowledge and positive attitude towards post operative management. Continuous education in pain management is crucial to improve nurses' knowledge and attitude towards post operative management. The results of this study provided a framework for the development and implementation of continuing education programs for nursing staff which can enhance the quality of patient care in post operative pain management. Therefore, it is imperative that pain assessment should be included as the fifth cardinal vital signs in the nursing curriculum.

ACKNOWLEDGEMENT

Special thanks to Prof. Dr. Baharudin Hj. Omar and Associate Professor Dr. Zaleha Md Isa for their contributions in editing and interpreting the results. In addition, thanks to Prof. Dr. Rohaizak Muhamad (Deputy Dean of Research Unit), and Puan Hamidah Hassan (Head of Department of Nursing) for their support in this study. Last but not least, to all nurses who participated in this study.

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