Knowledge, Attitudes and Practices of Postoperative Pain Assessment and Management among Health Care Practitioners in Cape Coast Metropolis, Ghana

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Abstract

Postoperative patients experience moderates to severe pain within first 48 hours and this minimizes comfort. This study aims to establish level of nurses' knowledge, attitudes and practices of postoperative pain assessment and management in Cape Coast. A descriptive quantitative, cross-sectional research design was used. A purposive sampling technique was used to select a sample of 200 nurse anaesthetists and registered nurses from Cape Coast Teaching Hospital and Cape Coast Metropolitan Hospital, Central Region, Ghana. The respondents' knowledge, attitudes and practices of postoperative pain management were evaluated using opened and closed-ended questionnaires. The findings of the study revealed, more than half of the respondents stated that postoperative pain is best told by the patients themselves but significant number 34% stated health care practitioners can best tell patient pain intensity. Less than half of the respondents observed the effect of pain medication on patients. Almost half of the respondents agreed patients would be addicted when they are given opioids analgesics. It was concluded that there were adequate knowledge of postoperative pain assessment and management among respondents but there is knowledge gap with regards to who best tell if patient experiences pain or not. Knowledge and practices of postoperative pain assessment and management were statistically significantly related and there is a strong relationship between knowledge and practice of postoperative pain assessment management. It was recommended that pain assessment and management should be done before and after administration of analgesia. Pain medications such as opioids should be given as and when necessary.

Keywords: *Post operation, Quality pain control, Health care practitioners, Assessment and management, Opioids analgesic, KAP of pain.*

Introduction

The purpose of the study was to establish level of nurses' knowledge, attitudes and practices of postoperative pain assessment and management in Cape Coast. Effective pain management is essential in the postoperative period to enhance comfort, prevent unnecessary distress and minimize potential complication. Pain is an inevitable common experience for patients after surgery because of tissue trauma (Klopfenstein, Hermann, Mamie, Van Gessel & Forster, 2001). Postoperative patients experience moderates to severe pain in the 1st 48 hours and this minimizes their comfort. If inadequately assessed and managed, postoperative pain leads to negative physiological and psychological experiences which hinder proper assessment and management of postoperative pain by health care providers, especially nurses.

Effective postoperative pain (POP) assessment and management is greatly associated with adequate knowledge of the nurse. Awareness of the perceived barriers (attitudes and practices) has also a great contribution to effective management of the pain. Lack of adequate knowledge of pain management and barriers can greatly compromise patients' wellbeing after the surgery. Pain is often described in the literature as a subjective complaint that acts as a warning sign (Hartrick, 2004). A high level of pain is expected immediately after surgery. It has been reported that there are inadequate pain management practices after surgery. Despite the

advancement of pain management modalities, many patients continue to suffer unnecessarily (Gordon, et al., 2005; Horner, Hanson, Wood, Silver & Reynolds, 2005; Sloman, Wruble, Rosen, & Rom, 2007). This might be due to lack of nurses' knowledge or related to their negative attitudes in dealing with the patients' complaints of pain. Numerous studies have described nurses' lack of knowledge to manage pain effectively, despite this advancement.

Nurses have the responsibility of adequately managing patients' post-operative pain. Effective pain management is essential in the post-operative period to ensure that patients do not experience unnecessary distress or suffering and to minimize potential complications. Post-operative pain management strategies should focus on combining pharmacological management and comfort measures to ensure maximum pain relief for each patient (Mackintosh-Franklin, 2007). As nurses who take care of patients around the clock, the postoperative patients expect that nurses will be able to relive their pain. In practice, nurses explain the cause of pain to patient and tell them to ask for medicines to relieve their pain when they have pain. The nurses also administer pain medications according to the doctors' treatment plan. Nurses take care of these patients to further relieve their pain by paying attention to the pain the patients are suffering from, asking about their pain, assessing pain intensity and providing comfort such as by positioning the patients.

There is an emerging body of knowledge directed towards understanding postoperative pain (POP) among patients who have undergone surgical experience. This knowledge is mainly concerned with the examinations of the patient's responses toward pain management services. Nevertheless, limited research has been conducted in the area of studying nurses' experiences in working with patients having POP in Ghana. Assessment from the accounts of the patients: including asking them about intensity, location, timing, and previous pain. The patients' accounts are an important factor in pain assessment based on the assumption that only the patients know the accurate quantity and amount of pain (Jackson, 1995).

Management of postoperative pain reliefs suffering and leads to earlier mobilization, shortened hospital stays, reduced hospital costs, and increased patient satisfaction (Watcha, Issioui, Klein, & White, 2003). Pain control regimens should not be standardized; rather, they are tailored to the needs of the individual patient, taking into account medical, psychological, and physical condition; age; level of fear or anxiety; surgical procedure; personal preference; and response to agents given. The major goal in the management of postoperative pain is minimizing the dose of medications to lessen side effects while still providing adequate analgesia. This goal is best accomplished with multimodal and pre-emptive analgesia (Watcha et al., 2003). A multidisciplinary team approach (e.g., acute pain service) is useful for formulating a plan for pain relief, particularly in complicated patients, such as those who have undergone extensive surgery, chronically use narcotics, or have medical co-morbidities that could increase their risk of analgesia-related complications or side effects.

Effects of pain on activities of daily living

The body's reactions to pain lead to physio-psychological sufferings, especially among patients who do not receive pain management or patients whose pain management is not sufficient (Taylor, Kuttler, Parks & Milton, 1998). Sufferings from pain arouse the patients' emotion, leading to irritability, agitation, mental discomfort, uneasiness, and lack of desire to socialize with others. As a result, their interpersonal relationships with other persons can be affected. Furthermore, reactions to pain increase the work of all organs, while some parts of the body tissues lack oxygen, so the stored energy will be expended. This can bring about exhaustion and suffering, and it can prevent the patients from doing activities of daily living and make them suffer from disturbed sleep.

Good, Stanton, Grass, Anderson, Makii and Geras (2000) carried out a study on postoperative gynecological pain during the first two days after surgery. They found that the sample had worst pain as follows: on the first postoperative day, they had severe pain and on the second postoperative day, they had moderate- severe pain. As for least pain, the sample had mild pain on both the first and the second postoperative days. As regards effects of pain, 30% of the patients reported that the pain disturbed their sleep in the first two postoperative nights, and 65% reported that they had difficulty sleeping during the first

postoperative night. In addition, it was found that pain increased when the patients moved after the operation, but pain decreased when the patients took a rest. Also, about nine percent of the patients used relaxation techniques to release pain. Thus, it could be concluded that moderate to severe pain cannot be relieved with medicines alone.

Based on the study of Good et al., (2000) it can be summarized that hysterectomy patients have severe pain in the first postoperative day which affects their sleep.

Postoperative pain assessment

1. Assessment from the accounts of the patients: including asking them about intensity, location, timing, and previous pain. The patients' accounts are an important factor in pain assessment based on the assumption that only the patients know the accurate quantity and amount of pain (Jackson, 1989).

1.1 The intensity of pain can be divided into three levels as follows:

1.1.1 Mild pain is found in about 30% of all patients. The intensity of pain is rather low, and it lasts one to two days. This level of pain can be decreased by using non-narcotic oral medications.

1.1.2 Moderate pain, like mild pain, can be found in approximately 30% of the patients. This type of pain has severe intensity and lasts a long time. To decrease this type of pain, weak opioids must be used.

1.1.3 Severe pain is found in about 40% of the patients. The level of pain intensity may be so high that only oral pain medication may not work, and other pain management methods such as regional anaesthesia may be required (Jackson, 1989).

There are two types of pain assessment: single-dimension scales and multiple-dimension scales.

Single –dimension assessment includes a straight line, faces, colours. Straight line is the assessments of intensity of pain in a straight line that have been used by various researchers in Thailand include the Visual Analogue Scale, Simple Descriptive Scale, Graphic Rating Scale, and Numeric Rating Scale.

Visual Analogue Scale: VAS is a straight line 10 centimeters in length. There are words underneath the line at both ends to indicate 'no pain at one end and pain as bad as it could possibly be at the other.

No pain   Pain as bad as it could possibly be.
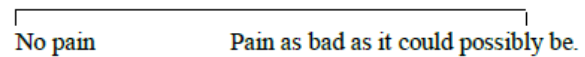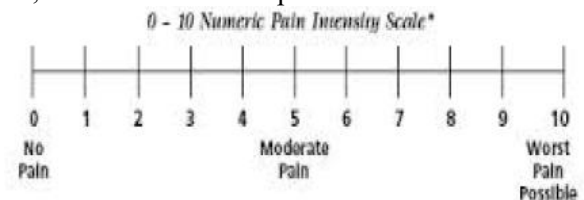
Figure 1. The visual analogue scale.

Simple Descriptive Scale (SDS): is a straight line with controlling numbers and words to indicate the level of pain, ranging from 0 to 5, and from 'no pain, to 'mild pain,' 'moderate amount of pain, 'severe pain, 'very severe pain,' and worst possible pain.'

A. Simple Descriptive Pain scale

No Pain   Mild Pain   Moderate Pain   Severe Pain   Very Severe Pain   Worst Possible Pain
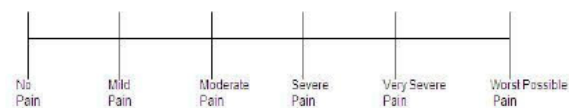
**Figure 2:** The Simple Descriptive Pain Scale

Graphic Rating Scale (GRS): is a straight line with words that are used as indicators of the levels of pain the patients are experiencing, form 'no pain, 'to 'mild,' moderate, 'severe, 'and 'pain as bad as it could possibly be. Numerical Rating Scale (NRS): is a straight line with the numbers on the top ranging from 0,1,2,3,4,5,6,7,8,9, to 10, and with the verbal interpretation on bottom. Number 0 means 'no pain', 5 means 'moderate pain.

0 – 10 Numeric Pain Intensity Scale*

0   1   2   3   4   5   6   7   8   9   10
No Pain   Moderate Pain   Worst Pain Possible

Figure 3. The Numerical Rating Scale

Colours; Stewart pain – colour scale is a strip of continuous colours, ranging from white, to yellow, to orange, to red, to violet, and to black. There are words at both ends of the strip to indicate no pain and the highest level of pain possible.

Face: Wong-Baker faces pain rating scale is a series of drawings of faces, starting from a smiling from a smiling fact and ending with a crying face. The accompanying numbers range from 0 to 10, indicating no pain at all to the highest level of pain.
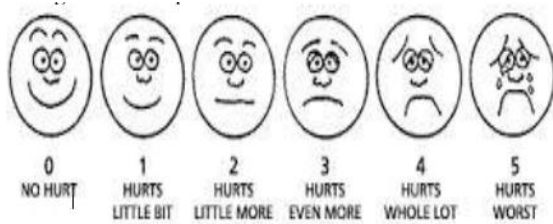
Figure 4. Wong-Baker Face Pain Rating Scale

Limitations

The limitations of this study were the use convenient sampling technique to select the respondents instead of the use of probability sampling technique to give respondents equal chance. To enhance the accuracy of the results by increasing the number of respondents by using more than three hospitals in order to get larger population size.

Achievements

I am a Registered General Nurse (RGN), Certified Registered Anaesthetist (CRA). I also hold Bachelor of Science Nursing (BSc. Nursing) and Master of Nursing (MN). I am a lecturer at the School of Nursing and Midwifery, University of Cape Coast, Ghana. I am a member of Medical and Dental Council of Ghana, Nursing and Midwifery Council of Ghana and Ghana Association of Certified Registered Anaesthetist.

Methods

The study design for this work was quantitative descriptive and a cross-sectional study. The study was conducted in the two major hospitals in the Central Region of Ghana. Cape Coast Teaching Hospital (CCTH) and Cape Coast Metropolitan Hospital (CCMH). These are the only two hospitals in the region that do almost all manner of surgical procedures. Both hospitals a situated in Cape Coast the capital of the Central Region. The teaching hospital perform all kinds of surgery with the exception of cardiopulmonary surgeries and it is the referral hospital for three regions in Ghana. It is the hospital that all health and allied health institutions use as their teaching hospital. The metropolitan hospital is also the second largest hospital in the region but refer also tot the teaching hospital.

Closed and open-ended self-administered questionnaire was used to collect data from the respondents. The questionnaire was subdivided using the specific objectives of the study. A period of four months was used to collect data from the respondents. Convenient sampling technique was used to select 200 respondents from the two hospitals. This technique was used because the respondents run shifts duty and it was difficult getting all of them at the same time. Also, some of the respondents were on annual leave and the research had to follow them to their locations. Data collected from the field was analyzed and presented. Data were analyzed using the Statistical Package for the Social Sciences (SPSS version 20.0) because this version was the one available at the time of analyzing data. Descriptive statistics (including frequency distributions and measures of central tendency) were used to organize and summarize the data. The results were recorded as frequencies, percentages, means, and standard deviations. To determine the effect of the POP management, samples t-test was used to compare data from the various groups, to evaluate the differences in KAP of POP assessment and management. A *p*-value less than 0.05 were used as significant for all the statistical tests.

The methods of the study were driven by the following research questions and hypothesis:

Research questions

1. What do the nurses know about postoperative pain assessment and management?
2. What are the health care providers' attitudes and beliefs about pain?
3. Do health care providers effectively assessed and managed postoperative pain?
4. What factors impede effective postoperative pain assessment and management?

Research hypothesis

Ho: There is a positive relationship between knowledge and practices of the nurses regarding postoperative pain assessment and management.

Results

Demographic characteristics of the respondents

The respondents were 200 health care practitioners who were nurse anaesthetics and professional nurses who worked directly with postoperative patients from Cape Coast Teaching Hospital and Cape Coast Metropolitan Hospital. Their age ranged from 20 to 49 years old, with the mean age of 29.9 years

(approximately 30 years). Half or 50% of the respondents were between 20 and 29 years old (Table 1). As for gender, 56% were females and males 44%. In addition, 79% were Christian and 68% were Akan. With regards to duration of service, 40% of the respondents had served for more than four years. Also, less than half (42%) had served in the postoperative ward between the ages of one to five (1-5) years. With regards to profession in the health service, more than half (52%) of the respondents were general nurses. For educational background, 54% of the respondents graduated with a diploma's/advanced diploma's degree and 6% had masters' degree. In terms of standards in used pain management, 80% practice current standards in pain management.

Table 1. Demographic characteristics of the respondents (N = 200)

Respondents	Frequency	Percentage (%)
Age (in years)		
20-29	100	50.0
30-39	92	46.0
40-49	8	4.0
Gender		
Male	88	44.0
Female	112	56.0
Religion		
Christian	158	79.0
Muslim	30	15.0
Traditional	12	6.0
Ethnicity		
Akan	136	68.0
Ewe	28	14.0
Ga	28	14.0
Northern	8	4.0
Duration of Service		
Less than a year	12	6.0
1-2 years	64	32.0
3-4 years	44	22.0
More than 4 years	80	40.0
Duration of Service in Postoperative Area		
Less than 1 years	76	38.0
1-5 years	84	42.0
6-10 years	40	20.0
Profession in Health Service		
Anaesthetist		
General Nurse	24	12.0
Enrolled Nurse	104	52.0
Others	56	28.0
	16	8.0
Education Qualification		
Certificate	44	22.0
Diploma/Advance Diploma	108	54.0
Bachelor (BSc)	36	18.0
Masters (MSc)	12	6.0

Research Question 1: What do the nurses know about postoperative pain assessment and management?

<div align="center">**Table 2.** Knowledge of Pain Assessment and Management</div>

Area of Knowledge	Poor No. %	Good No. %	Chi-Square	*p*-value
Person who best tells about patient's pain	68 34.0	132 66.0	5.255	.022
Knowledge of POP enhances management	4 2.0	196 98.0	59.875	.000
Impact of effective POP management	76 38.0	124 62.0	2.922	.087
Effect of pain on patient's behaviour	64 32.0	136 68.0	6.697	.010
Each patient experiences pain differently	16 8.0	184 92.0	42.836	.000
Pain assessment ensures effective management	20 10.0	180 90.0	38.095	.000

The finding from the study indicated that more than half (66%) of the respondents stated the pain is not best tell by the professions whiles 34% indicated health professional can best tell pain of a patient. Also, the result of the study, almost all (92%) of the respondents indicated that the knowledge of the health care professional on pain can better be used to manage pain and only 2% stated they cannot manage pain with their knowledge.

Results shows that more than half (62%) of the respondents indicated that postoperative pain has impact on muscle tension whiles 38% stated pain had no impact on muscle tension. Also, more than half (68%) of the respondents stated pain affects patients' behaviour while 32% stated otherwise. The results also that almost all the respondents (92%) stated patients experience pain differently after surgery whiles 8% did not believe that. From the result above, 90% respondent that severe pain affects patients' vital signs but 10% did not believe that. Almost all the respondents (98%) of the respondents stated that to effectively manage pain, it must first be assessed but 2% did not support it.

Research Question 2: What are the health care providers' attitudes and beliefs about pain?

Table 3. Attitudes of Health Care Practitioners Toward POP Control (N=200)

Area of Attitude	Strongly Agree No. (%)	Agree No. (%)	Disagree No. (%)	Strongly Disagree No. (%)
Culturally, pain or suffering is necessary	8(4)	20(10)	84(42)	88(44)
If a patient lies quietly in bed it means he/she is not in pain	8(4)	0(0)	92(46)	100(50)
Behavioural observation is not appropriate pain assessment	4(2)	36(18)	104(52)	56(28)
Pain should be assessed before and after pain management	112(56)	40(20)	40(20)	8(4)
After an operation, if the patient seems to rest in bed with no body movement, it means that the patient has no post-operative pain	4(2)	104(52)	68(34)	24(12)
Allowing relatives to be involved in POP care will help to reduce pain	4(2)	36(18)	136(68)	24(12)
Patients' beliefs and values should be considered when assessing and managing pain	60(30)	56(28)	60(30)	24(12)

In this study as shown in Table 4, the attitudes of the respondents towards postoperative pain were assessed. None of the respondents selected neutral. The findings were as follows: as regarding assessment of pain after surgery, less than half (30%) indicated they constantly do while 40% indicated they frequently do so. In terms of administration of pain medication, more than half (52%) stated they frequently administer pain medication to relieve patients' pain. The findings also indicated that, more than half (56%) frequently document the characteristics of postoperative pain and about 46% which is majority frequently observed the side effect of pain medication.

It was also revealed that 36% which is majority occasionally administer pain medication based on one's own judgement. Concerning reassessment of pain after the administration of pain medication, 58% stated, they frequently reassess after pain medication. Regarding distraction of patients from pain, occasionally 48% distract patients' mind from pain. With regards to the attitudes of the health care practitioners, 64% of the respondents talked to patients in pain in a soft voice. The study also revealed that 42% which is less than half constantly document pain intervention after administration of pain.

The study revealed that 30% of the respondents always and sometimes consider patients' beliefs when assessing and managing pain. When considering the practices of postoperative pain management, 68% which is more than half of the respondents indicated that, sometimes involved relatives in the management of pain to reduce pain after surgery.

The results show that majority or 56% of the respondents always assess patients' pain before and after the administration of pain medication but 4% revealed that they never assess pain before and after administration of analgesics.

The study revealed that the respondents believe that patients think that pain is necessary in accordance with their beliefs. The results

show that 44% which is the majority of the respondents do think that pain is necessity.

Research Question 3: Do health care providers effectively assessed and managed postoperative pain?

Table 4. Practices of Postoperative Pain Control (N=200) Constantly = Cont, Frequently = Freq, Occasional = Occa, Never = Nev

Area of Practice	Const	Freq	Occa	Nev
Assess pain before manage	60(30)	80(40)	52(26)	8(4)
Document the POP pain characteristics.	48(24)	112(56)	36(18)	4(4)
Reassess POP pain after pain medication.	36(18)	116(58)	36(18)	12(6)
Pain medication is administered routinely	24(12)	104(52)	60(30)	12(6)
Pain medication is administered based on personal judgement	36(18)	44(22)	84(42)	36(18)
Observed the side effects of pain medication (Morphine) after administration.	52(26)	92(46)	36(18)	20(10)
Distract patient attention from pain using non-pharmacological methods	36(18)	40(20)	96(48)	28(14)

In this study, the practices of the respondents towards postoperative pain were assessed. The findings were as follows: as regarding assessment of pain after surgery, less than half (30%) indicated they constantly do while 40% indicated they frequently assess pain after surgery. In terms of administration of pain medication, more than half (52%) stated they frequently administer pain medication to relieve patients' pain. The findings also indicated that, more than half (56%) frequently document the characteristics of postoperative pain and about 46% which is majority frequently observed the side effect of pain medication such as morphine.

It was also revealed that, 42% which is majority occasionally administer pain medication based on one's own judgement. Concerning reassessment of pain after the administration of pain medication, 58% stated, they frequently reassess after pain medication. Regarding distraction of patients' attention from pain, occasionally 48% distract patients' mind from pain.

Research Question 4: What factors impede effective postoperative pain assessment and management?

Table 5. Perceived barriers to postoperative pain assessment and management

Perceived Barriers	Yes No. %	No No. %	Total
Fear of addiction	136 68.0	64 32.0	200
Patient's ethnicity	132 66.0	68 34.0	200
Non-Availability of Drugs	150 75.0	50 25.0	200

Table 6. Test for Knowledge and Practices of Postoperative Pain Management

		Knowledge	Practice
Knowledge	Pearson Correlation Sig. (2-tailed) N	1 200	0.985** 0.002 5
Practice	Pearson Correlation Sig. (2-tailed) N	0.985** 0.002 5	1 200

The study revealed that opioids addiction is one of the barriers to the management of postoperative pain. The results show that more than half (68%) agreed that patients will be addicted when given opioids. Also, the results show that less than half (66%) which is the majority of the respondents strongly agreed that the ethnicity of a patient can be a barrier to postoperative pain management. Majority of the respondents stated that non-availability of analgesics are barriers to POP management.

Research Hypothesis: There is a positive relationship between knowledge and practices of the nurses regarding postoperative pain assessment and management.

The table shows correlation knowledge and postoperative pain management practices. This means that there is a strong relationship between the two variables. From the table above, the Pearson's r is 0.985. This value is very close to 1. For this reason, it was concluded that there is a strong relationship between knowledge and the usefulness of practice of postoperative pain management.

Furthermore, from the tables the Sig. (2-Tailed) value is 0.002. Since this value is less than 0.05, it is concluded that there is a statistically significant correlation between knowledge and postoperative pain management.

Table 7. Chi-Square Test for Knowledge and Practices of Postoperative Pain Management

	Value	Df	Asymp. Sig (2-sig)
Pearson Chi-Square	96.73	4	0.000
Likelihood Ratio	79.44	4	0.000
Linear-by-Linear	23.83	1	0.120
Association N of Valid Cases	200		

The results above examine how significant knowledge differs across the amount of usefulness respondent attached to postoperative pain management practices. A p-value of .000

confirms a significant association between knowledge and the usefulness of practice of postoperative pain management. It is also an indication that the practices of care in postoperative pain management differs across the various academic qualifications (knowledge).

Discussion

Knowledge regarding postoperative pain

The post-operative orders commonly used are mere guidelines and hence may not sufficiently address post-operative pain management for every patient operated on. Those who take care of the patients need to have the knowledge on post- operative pain management which should be applied appropriately in the immediate post-surgical period for the patients to benefit. Despite the majority (66%) of the respondents in the study indicated that postoperative pain is best told by the patients themselves, most (98%) of them felt they had sufficient knowledge on postoperative pain assessment and management. This is not consisted with a study by Johansen, Romundstad, Nielsen, Schirmer, & Stubhaug, (2012), which reported that the incidence of persistent postoperative pain (PPP) is as high as 40% with 18.3% of patients reporting moderate or severe pain.

A further 34% said pain is best told by health care professionals but not the patients. The finding of this study is not corresponded with the findings of Johnson (1989) who investigated the assessment of pain from the accounts of patients which were included intensity, location, timing and previous pain. The finding indicated that patients accounts on are an important factor in pain assessment based on the assumption that only patients know the accurate quantity and amount of pain. It also incurs with Adequate pain management would be better managed if it were based on evidence-based knowledge (Wilson, 2007). Also, the findings from this study support Wilson (2007) who reported that pain management education and area of specialty affects knowledge of pain management. But she also suggested that the work environment also plays a factor in the success of pain management for patients. Nurses must become be educated, encouraged to be reflect, and to use evidence-based practice in the management of pain.

The results show that more than half (68%) of the respondents stated pain affects patients' behavoir while 32% stated otherwise. This finding is consistent with a study by Luckmann and Sorensen (1987) and Johnson (1989) who studied behavioural observation of patients. They reported that pain affect patients' behavioural changes. The study by Peters, Sommer, Van Kleef and Marcus (2010) and Khan, Ahmed and Blakeway (2011) support this result. They reported that evidence indicates that psychological factors, including anxiety, depression, fear of surgery and catastrophes associated with increased risk for persistent POP.

Attitudes of health care practitioners towards postoperative pain

The study revealed that 40% of the respondents frequently assess patients' pain and also 52% frequently administer analgesics after the assessment of pain. This concurs with other studies (Chapman & Syrjala, 2001) which used McGill Pain Questionnaire (MPQ) to assess location of pain, characteristics of pain, pain relief, and level of intensity of pain. The items included are both closed-ended and open-ended questions. Pain characteristics as described by the patients such as dull pain, throbbing pain, sharp pain, exhausting pain, burning and stinging pain, writhing pain, as well as other feelings that accompany pain such as nausea, vomiting (Prevost, 2005; Price, & Bushnell, 2004).

The dose of analgesic for pain relief that the patients receive is an indicator for the severity of pain and duration of pain, as reported in the studies of Prevost (2005) with abdominal hysterectomy patients, ANZCA (2005) with patients with abdominal surgery, and Swain (2008) with patients undergoing a caesarean section. These findings are consistent with the study findings which revealed that less than half (46%) of the respondents observed the effect of medication on the patients. The finding of this study also indicated that, most of the respondents (36%) which is the majority occasionally administer pain medication base on their own judgement but 18% of the respondents had never administer medication base on their own judgement. This is not in consistent with the study by Jablonski and Ersek (2009) which stated that nurses must be able to become

autonomous and also work within interdisciplinary teams when attempting to manage patients' pain. Jablonski and Ersek (2009) proclaimed that a gap between current best practice, and actual practice related to pain management in long term care facilities continues to exist. The purpose of their study was to investigate the extent to which staff working in extended care facilities, adhere to pain management practice guidelines, and incorporate evidence-based practice into their daily work related to adequate pain management.

It was revealed by this study that, less than half (42%) of the respondents constantly document the intervention rendered to patients. This supports and is in consistent with a study which stated that nurses commonly oversee residents' plan of care due to the lack of visits by the primary care physician. Nurses caring for the residents are in the best position to assess their pain. The testing of interventions focused on nursing documentation (Jablonski & Ersek, 2009) and assessments of analgesic agents' effectiveness were shown to be 40% and 20% respectively for PRN and scheduled pain medications. Medication side effects related to documentation was also poor (73%). Documentation of the re-evaluation of new medication side effects was (63%); however, this was not within the recommended time frames (Jablonski & Ersek, 2009). More than half (58%) frequently reassess pain after the administration of analgesics and 18% constantly reassess the intensity of pain after given patient analgesic. These results are in support of a study by Jablonski and Ersek (2009) which stated that Frequency of assessment was also included with these indicators as well as the effectiveness of changes in pain following a change in the treatment regimen, and assessment of residents' side effects after receiving analgesics.

The findings show that more than half (56%) of the subjects stated that they always assess pain before and after administration of analgesics. These findings are not in consistent with a research that indicates a lack of knowledge for best practice related to opioid use. There is a considerable gap between best practice and how care providers assessed and adequately managed pain for the residents in the care of the staff. As a result, an appeal has been made to staff members of nursing homes and administrators to investigate their current policies and procedures. Failure to comply with current best practice must not (Jablonski & Ersek, 2009).

The finding is consistent with a study by Rees (2000) which stated that postoperative pain management is a major responsibility of nurses who provide care for patients recovering from surgery. In the postsurgical environment, the nurse has a pivotal role in assessing the patient with pain, implementing both doctor and nurse-initiated pain interventions and evaluating the patient's response to pain control treatments. Apart from its humanitarian utility, effective relief of postoperative pain is a critical element of a patient's postoperative recovery.

Postoperative pain Assessment and management Practices

The study indicated that 40% of the respondents frequently assess pain before they manage. This finding is supported by a study conducted by Chronic Pain Policy Coalition [CPPC] (2007) which reported that the use of visual analogue scale has been used by several researchers to assess pain. With regards to the characteristics of pain the finding of this study indicated that more than half of the respondents 56% stated that they frequently document the characteristics of POP. This is consistent with the study by Poomnikom (2000) and CPPC (2007) which reported that Pain characteristics as described by the patients such as dull pain, throbbing pain, sharp pain, exhausting pain, burning and stinging pain, writhing pain, as well as other feelings that accompany pain such as nausea, vomiting.

Barriers to effective postoperative pain assessment and management

The respondents (52%) agreed that patient would be addicted when given opioids analgesics as barriers to the effective management of postoperative pain. The finding is consistent with the study by Helme and Gibson (2001) which states that significant life events such as a death of a spouse, retirement from their job, or their loss of independence, may alter their views on pain. Researchers also found that patients were reluctant to report pain and feared that opioids were addictive or too dangerous (Kaasalainen, Martin-Misener, Carter, DiCenso, Donald, & Baxter 2010).

Conclusions

There were adequate knowledge of postoperative pain assessment and management among respondents but there is still knowledge gap with regards to who best tell if there is pain. The survey has made it evidently clear that most of the respondents assess pain before and after administration of pain medications. The study also demonstrated that, respondents frequently reassess patient for side effects of pain medications. The study revealed that respondents withheld opioids because they believe opioids will cause addiction to patients. It is concluded that knowledge and practices of postoperative pain assessment and management were statistically significantly related and there is a strong relationship between knowledge and practice of postoperative pain assessment management. The recommended that, non-pharmacological approach should be used in combination of opioids for postoperative pain control, hand books should be available for nurses to enhance effective postoperative pain assessment and management. Also, further should be done on factors that influence postoperative pain.

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