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POST-OPERATIVE PAIN MANAGEMENT AMONG NURSES ON
TRAINING PROGRAMME

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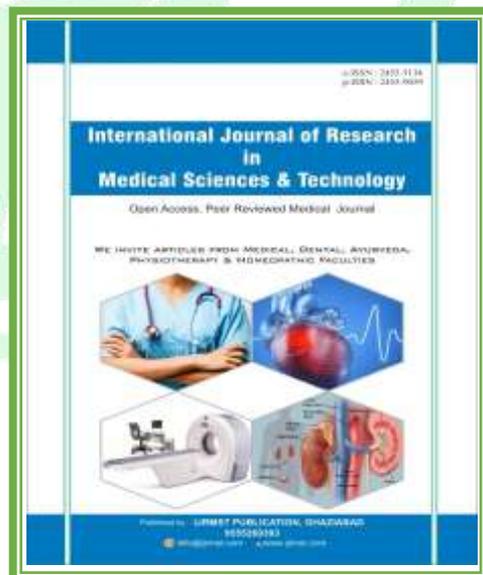
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ABSTRACT

Postoperative pain is a prevalent experience in persons hospitalised in surgical institutions. Therefore, controlling and decreasing it are one of the aims of nursing. A total of 86 Nurses participated in the study of which 78 of them were females and 8 men. Pain management training programmes both boosted the knowledge and modified the attitudes of nurses regarding pain treatment and control. The proportion of surgical treatments conducted is expanding globally. There is a difficulty of successfully treating Postoperative Pain (POP) because of the growth in the number of surgical procedures undertaken. POP management is a significant role of all healthcare personnel, but nurses in particular. This is because the nurses are the frontlines for the patient care. So that, understanding the nurses degree of practice towards POP treatment and related components is a vital and major concerns to strengthen the recovery of the patients from their pain sooner. However the practice of POP treatment and related variables among nurses working in a surgical track in the research region is unclear.

Keywords: knowledge, training, postoperative, pain, Nurses

INTRODUCTION

One of the biggest clinical concerns for healthcare workers, particularly nurses, is the treatment of post-operative pain. An unpleasant chemical, thermal or mechanical stimulation connected with surgery is expected to cause postoperative discomfort. As a result, the study's goal was to examine how nurses' attitudes, knowledge, and self-efficacy related to postoperative pain treatment, as well as how those factors interacted. Patients' postoperative pain is crucially managed by nurses, who spend more time with them than any other healthcare provider. In order to investigate the relationships between postoperative pain management knowledge, attitude, and self-efficacy, a framework based on the Theory of

Reasoned Action was developed. Many health care providers, especially those in the acute-care and post-operative settings, have to deal with pain on a regular basis. In addition, a comprehensive evaluation of patients' pain should be the cornerstone for all pain-related interventions. Traditionally, nurses have been seen to be responsible for providing pain relief measures since they are with patients throughout their recovery from surgery and when they report discomfort to their supervisors. As a result, the post-operative recovery of surgical patients depends on the nurses' estimates of pain.

LITERATURE REVIEW

XUELIANLIU ET.AL (2021) The purpose of this study is to determine if a

pain management core competence education programme has an impact on surgical nurses' awareness of pain and pain management practise. Surgery nurses were taught pain management core competence by a multidisciplinary team twice in two weeks. The training covered the multidimensional nature of pain as well as evaluation and pharmacological and nonpharmacological therapy, as well as knowledge application and the 8-hour education programme. Dosimetric training, as well as vignettes of real-life events for nurses to debate, were used in this study to great effect. Before and after the programme, 135 and 107 nurses from 17 surgical wards completed the Clinical Pain Knowledge Test (CPKT), which was administered before and after the programme. Patients' medical records from two hundred and three different wards were randomly selected depending on the number of procedures conducted in each ward during the preceding week and the following week before the intervention, respectively. Patients' postoperative pain management nursing practise behaviours and pain intensity ratings were documented, and the information was compiled into a report. Following the intervention, the CPKT scores of nursing staff increased from 45.6 percent + 12.3 percent to 54.2 percent + 10.2 percent ($t =$

5.786, $P = 0.001$), a significant increase. Those who used pain intensity assessment tools increased from 81.8 percent (99/121) to 95.4 percent (145/152) ($\chi^2 = 13.079$, $P = 0.001$), and intramuscular injection of nonopioids decreased from 12.6 percent (13/103) to 2.7 percent (3/111). The percentage of postoperative pain assessment documentation increased from 59.6 percent (121/203) to 74.9 percent (152/203) ($\chi^2 = 10.746$, $P = 0.001$), and the percentage of those who used pain intensity assessment tools increased from 8 A significant reduction in average pain ratings was seen on both the first and third postoperative days ($Z = -2.486$, $P = 0.013$), and this trend remained throughout the whole three-day following period. A pain management core competency training programme for surgical nurses may help them get a better grasp of the fundamental skills involved in pain management, improve their pain treatment practises, and minimise the degree of postoperative pain for their patients.

M O OLAWALE ET.AL (2020)

Reduced or eliminated pain and suffering following surgery with minimal adverse effects is the goal of postoperative pain management. Following surgery, pain is a common and anticipated occurrence, and if it isn't well handled, it presents a significant danger to the patient.

Postoperative discomfort is a common consequence for most individuals, according to studies. As a result, it's critical to devise strategies for enhancing nurses' expertise of postoperative pain management. The purpose of this study was to determine the effect of a postoperative pain management education programme on the knowledge of adult surgical ward nurses at Lagos University Teaching Hospital in Nigeria. In a quasi-experimental research design, a random selection procedure was used to choose a total of 60 nurses, who were then randomly assigned to different groups. With the use of random sampling, this group was divided into two (control n=30, experimental n=30). The information was gathered via the use of the 'Knowledge and Attitudes Survey on Pain' tool. An ethical clearance was obtained by the hospital prior to the administration of the questionnaire. The data were coded and analysed using the Statistical Package for Social Sciences version 21.0 statistical software, with a significance level of $p=0.05$ being applied for statistical significance. The mean (standard deviation) score on postoperative pain management knowledge among participants in the control group was 1.05 (0.60) and 1.06 (0.63), respectively, with a mean difference of 0.01. The mean

difference between the control and intervention groups was 0.01. The average knowledge of postoperative pain management in the experimental group improved to 1.62 (0.97), whereas the average knowledge in the control group decreased to 1.05 (0.62), resulting in a mean difference of 0.57 between the two groups after the intervention. Participants' knowledge of postoperative pain management varied substantially between the pre- and post-intervention mean scores ($t=3.68$, $p=0.00$), indicating that the intervention was effective.

ODILEUMUHOZA ET.AL (2019) Pain, according to the WHO, is still a problem that requires a multidisciplinary approach despite not being on the list of diseases that cause it. In dealing with severe post-operative pain, nurses all over the globe continue to struggle due to a lack of awareness and expertise. To determine how effectively Rwandan surgical ward nurses comprehended and used the concepts of acute post-operative pain management, this study was conducted. According to the descriptive cross-sectional technique utilised in this study, 131 surgical ward nurses were selected at random from a convenience sample of 315 nurses. The information requested was gathered via the use of a self-administered questionnaire. The data was analysed using

linear regression and Pearson's correlation coefficient, among other techniques. Eighty-four percent (74 percent) of the 97 nurses who took part in the study were knowledgeable about post-operative pain management measures. One hundred and fifteen nurses (or 88 percent) have at least some expertise dealing with post-operative pain that occurs within 24 hours of the procedure being performed. Nurses' perceived competence was shown to be positively connected with their age, gender, marital status, educational level, and job experience (all p values less than 0.001). Nurturing practise was found to be associated with only three variables: age (32.9-33.6, 95 percent confidence interval (CI): 32.9-33.6), educational level (32.22-23.4, P = 0.002), and working experience (32.5 95 percent confidence interval (CI): 32-33). Age (32.9-33.6, 95 percent confidence interval (CI): 32.9-33.6; educational level (32.22-23.4, P = 0.002). However, these three factors were unable to account for the whole of the variation. A simple linear regression revealed that knowledge contributed 14.4 percent to observed practise in the case of a simple linear regression. It is necessary for hospital administration to engage in continuous professional development (CPD) with an emphasis on skills, and to monitor and evaluate this growth in order

to enhance nurses' abilities in pain management in order to improve patient outcomes.

AWUBE MENLAH ET.AL (2018) The treatment of postoperative pain (POP) has several obstacles across the world, as recorded data shows. In underdeveloped nations, however, these issues are more acute. The purpose of this study is to evaluate the knowledge, attitudes, and behaviours of nurses in four selected district hospitals in Ghana with relation to the management of POP in order to provide recommendations. Through the use of a descriptive cross-sectional survey, we were able to learn about nurses' attitudes, behaviours, and attitudes on POP management. The respondents were chosen using a multistage sampling process. The knowledge, attitudes, and behaviours of nurses and midwives in the area of pain were examined using a modified version of the Nurses Knowledge and Attitudes Survey Regarding Pain. Data analysis was carried out in order to offer quantitative descriptions of the study's variables, and descriptive statistics were used. Nurses in the four district hospitals evaluated in this study were found to be deficient in their knowledge of postoperative pain management (POP). A total of 81 percent of nurses did not have a fundamental grasp of POP management.

The great majority of nurses (97.6 percent) relied on regularly given essential nursing skills to solve the problem of patient overcrowding. However, nurses were more optimistic about the treatment of POPs than doctors. Nurses in Ghana's local hospitals do a dismal job when it comes to controlling POP. Nurses and midwives in Ghana must improve their theoretical and practical grasp of POP management in order to witness a positive change in the country's POP management practises.

DAN BENHAMOU ET.AL (2017) The implementation of evidence-based postoperative pain management (POPM) recommendations has resulted in a majority of professionals agreeing that pain control is still unacceptable. It is difficult to provide effective analgesia for patients when personnel lack sufficient understanding about POPM, lack of instructions, inadequate pain assessments and suboptimal therapy are all factors. Policymakers and healthcare practitioners can only enhance the quality of care if POPM is properly monitored. These quantitative metrics of clinical practise may be used to monitor, assess, and influence the quality of treatment delivered to patients. Patients with conditions like myocardial infarction and other life-threatening illnesses have benefited from QIs' usage in assessing many components

of the treatment process. Pain specialists from Europe and the United States who are members of the Change Pain Advisory Board provide their opinions on the evidence for and against the use of QIs in acute POPM. Our study focused on what has been published on quality improvement interventions (QIs) in acute pain, with the purpose of establishing which QIs have been effective or unsuccessful, as well as which have been created and implemented. Quality improvement initiatives (QIs) in the healthcare business may be challenging to implement and maintain. POPM requires a diverse group of highly skilled professionals in order to achieve substantial advancements. It is also expected that increasing patient participation in pain management would result in improved clinical outcomes. Regular audits are required to ensure that improvements in organisational structure and processes to provide high-quality treatment are translating into better outcomes for patients and their families. Using Quality Indicators (QIs) may help with this process by providing an indicator of current performance levels. Outcomes Quality Indicators (QIs) may also be used to compare the levels of performance of different healthcare institutions.

METHODOLOGY

Nursing personnel at a tertiary hospital linked to KRIMS Karwar were surveyed for two months as part of this cross-sectional research (September-october 2019). 90 nurses from KRIMS Hospital were included in the research. Nursing professionals with at least six months of surgical department experience and an approved nursing degree were selected for the research. Nurses who volunteered to participate in the research were given written permission. Participants in the research who consented to participate were guaranteed secrecy since they were not asked to submit any form of identity on the questionnaire. Those nurses who did not want to participate in the research and those who were on leave throughout the data collecting period were omitted from the study.

Data Collection: We sent nurses the Pain Knowledge and Practice Questionnaire and an introductory information sheet to complete. A short pain assessment and an introductory information sheet were given to patients.

Design and Sample: Because there is no control group, this research was planned as a quasi-experimental study with two tests, one before and one after the intervention. Internal medicine clinic

nurses and inpatients at a training and research hospital were both included in the study's sample size. The following criteria must be met by participants in this study: they must be at least 18 years old, have been hospitalised for at least one week, have a pain level of 1 or higher, be conscious, and have given their consent to participate. Participation in this study was open to all nurses who worked in internal medicine clinics at the hospital where the research was carried out, provided that they had given their consent to take part in it.

RESULTS

The research included 86 nurses, 78 of whom were female and 8 of whom were male. 31 percent of them were between the ages of 31 and 40. Sixty-one percent of the nurses had been working for at least five years before being interviewed. The bulk of them, 76.7 percent, had a diploma in nursing. Table 1 shows the results of the experiment

Table 1: Demographic details of the respondents

Determinants	Frequency (%)	
Gender		
Males	8	(9.3%)
Females	78	(90.7%)
Age		
20-30	22	(25.5%)
31-40	27	(31.3%)
41-50	21	(24.4%)
51-60	16	(18.6%)
Experience		
<1 year	13	(15.1%)
1 to 5 years	21	(24.4%)
5 to 10 years	25	(29.1%)
>10 years	27	(31.4%)
Qualification		
Diploma Nursing	66	(76.7%)
BSc. Nursing	10	(11.6%)
PBBSc. Nursing	8	(9.3%)
MSc. Nursing	2	(2.32%)

Table 2: Knowledge regarding post-operative management

Knowledge questions	Responses		Right
	True (%)	False (%)	Answer
1. Vital signs are always reliable indicators of the intensity of a patient's pain.	65 (75.5)	21 (24.5)	F
2. Because their nervous system is underdeveloped, children under two years of age have a limited memory of painful experiences	19 (18.6)	67 (81.4)	F
3. Patients who can be distracted from pain usually do not have severe pain.	75 (87.2)	11 (17.8)	F
4. Patients may sleep in spite of severe pain.	25 (29)	61 (71)	T
5. Acute pain lasts for 20 to 30 days	22 (25.5)	64 (74.5)	T
6. Pain assessment includes onset, duration, variability, location, and intensity	81 (94.1)	5 (5.9)	T
7. Combining analgesics that work by different mechanisms (e.g., combining opioids with non-opioid analgesics) provides better pain control with fewer side effects than using a single analgesic agent.	78 (90.6)	8 (9.4)	T
8. Glasgow Coma Scale is a pain assessment tool	41 (47.6)	45 (52.4)	F
9. Untreated POP delays recovery	72 (83.7)	14 (16.3)	T
10. Opioids should not be used in patients with a history of substance abuse	31 (36)	55 (64)	F
11. Elderly patients cannot tolerate opioids for pain relief	12 (13.9)	74 (86.1)	F
12. Effective analgesia is an essential part of POP management.	80 (93)	6 (7)	T
13. Children less than 11 years old cannot reliably report pain so clinicians should use a validated pain assessment tool to assess the child's pain intensity	51 (59.3)	35 (40.7)	F
14. Using pain management assessment tool is not integral in POP management	19 (22)	67 (78)	F
15. After an initial dose of opioid analgesic is given, subsequent doses should be given based on individual patient's response	11 (12.7)	75 (87.2)	T
16. Analgesics for POP should initially be given around the clock on a fixed schedule	55 (63.9)	31 (36.1)	T
17. Anticonvulsant drugs such as gabapentin (Neurontin) produce optimal pain relief	27 (31.3)	59 (68.7)	F
18. Benzodiazepines are not effective pain relievers unless the pain is due to muscle spasm	44 (51.1)	42 (48.9)	T
19. Naloxone antagonizes (reverses) all opiates, but its effect quickly wears off	59 (68.6)	27 (31.4)	F

Those who scored 10 or less out of a total of 19 were deemed to have insufficient knowledge, while those who scored 11 or more were regarded to have enough POP management expertise. There were 55 of them, or 64 percent, with acceptable POP management expertise, according to the study results. When it came to getting seven of the questions right, the most common answers were 2, 6, 7, 9, 11, and 12. Question 1, 3, 4, 5, 15, and 19 had the highest percentage of erroneous answers.

Table 3 Nurses' practices for pain control before and after the training

Nurse practice	Pre-Training	Post-Training	p
Using scales in pain assessment			
Yes	100	100	1.00
No	0	0	
Comprehensive pain assessment			
Yes	50	60	0.687
No	50	40	
Asking about factors that reduce and increase pain			
Yes	35	60	0.25
No	65	40	
Decide on appropriate analgesic treatment			
Yes	90	100	0.50

No	10	0	
Assessing pain after analgesia			
Yes	85	85	1.00
No	15	15	
Informing the patient about pain			
Yes	40	80	0.021
No	60	20	
Using nonpharmacological methods			
Yes	35	65	0.70
No	65	35	

“NURSES’ KNOWLEDGE AND PRACTICES FOR PAIN MANAGEMENT”

There were 38.703.97 nurses on average; all were female and 65% had a licencing degree. Nurses had an average of 15.17 5.55'dir. years of professional experience. Prior to this assignment, all of the nurses had received pain management training.

Only the percentage of nurses who correctly answered the questions regarding "reducing pain with placebo" and "the factors decreasing the tolerance to pain" before and after training showed a statistically significant increase in their

ability to answer practically all knowledge test questions correctly.

The average knowledge level of nurses before and after the training was indicated by a score of 0.67 0.15 compared to a score of 0.81 0.13, respectively. It was discovered that the average knowledge score before and after training differed by $Z=-2.79$ ($p=0,005$), indicating that there was a statistically significant change.

Only the practise of "informing the patient about discomfort" rose considerably after the training ($p 0.001$). Before and after the training, the nurses' other methods for dealing with pain were not substantially

different. A statistically insignificant difference was detected between the proportion of nurses who said they performed a full pain evaluation before and after training in our research, in which only half of the participants said they did so. Pain treatment "using non pharmaceutical approaches" rose in percentage, but no statistically significant difference was found ($p>0.001$) despite this rise. A (Table 3)

CONCLUSION

Nursing practise did not change much following the training, despite the fact that the nurses' knowledge levels rose. Pain treatment is important, but healthcare practitioners must adapt their practises so that patients may benefit from the

information they have access to. It is important to engage patients and their families in the decision-making process for pain management, and an open communication environment should be created for the continual evaluation of pain status and treatment. Inadequacy in knowledge was self-reported by nurses in this research, however it was not worrisome when compared to other nations. There was a greater lack of understanding in the evaluation of pain than in the treatment of pain. To stay on top of the latest developments in postoperative pain care, nurses need access to ongoing professional development opportunities. Using tools, procedures, and charts correctly and consistently requires a supportive atmosphere.

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