KNOWLEDGE OF THE APPROACHES TOWARDS CANCER PAIN MANAGEMENT IN PATIENTS CARE AMONG NURSES IN SELECTED HOSPITALS IN AKWA IBOM STATE

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ABSTRACT

Background: Cancer-related pain can be acute or chronic and related to tumour, treatment, or both. Cancer pain has a debilitating effect and, if left untreated or poorly managed, can have a significant impact on a patient's physical, emotional, and mental well-being, thus impairing the patient's quality of life. Immediately a comprehensive assessment of a patient's pain is concluded, different treatment approaches should be considered before treatment planning is developed.

Aim: This study examined knowledge and approaches used in managing cancer pain in cancer patients among nurses in selected hospitals in Akwa Ibom State, Nigeria.

Materials and methods: A cross-sectional descriptive survey was carried out among 88 registered nurses purposely recruited from selected hospitals in Akwa Ibom State. Data was collected using Observational checklist and revised Nurses Knowledge and Attitudes Survey Regarding Pain (NKASRP) questionnaire. The obtained data were summarized using frequencies, Percentages and chi-square.

Results: More than half of the nurses 64 (73.70%) had adequate knowledge about cancer pain management while only 3 out of 10 cancer pain management approach was satisfactorily utilized by the participants in the care of cancer patient aimed at relieving pain.

Conclusions: Although more of the nurses had adequate knowledge on cancer pain management, the approach used was sub-optimal.

Keywords: *cancer pain, management approach, nurses***.**

Introduction

Cancer is one of the leading causes of death worldwide, killing nearly 10 million people annually[1]. Lung cancer, stomach cancer, colon cancer, liver cancer, and breast cancer cause the highest number of cancer-related deaths each year. Cancer accounts for nearly one in six deaths worldwide[2]. According to National Cancer Institute[3],cancer is a disease in which cells in the body grow out of control and spread to different parts of the body, cancer is a genetic and physical disease. When cancer develops, permanent changes in DNA are propagated to daughter cells[4]. Cancer appearance varies a lot from what is seen in tissue. The previously homogenous tumour tissue becomes heterogeneous as a result of the mutation[5].

Despite the overall trend of declining cancer incidence, the number of cancer patients is increasing, with an estimated 1 million new cases each year, more than half of them in developing countries[2]. About 60-70% of cancer cases in Nigeria are in an advanced stage. At least 30% of these cases suffer from one or more types of pain, which are mostly characteristic of the pathognomy of the illness state[6]. According to National Cancer Control plan Nigeria[7], 72,000 people die from cancer each year in Nigeria and an estimated 102,000 new cases of cancer are diagnosed each year.

Cancer patients usually suffer from different types of pain, including acute, chronic, episodic, breakthrough, procedural, neuropathic and nociceptive pain. Cancer pain, if not properly managed, can affect patients' physiological, psychological, social and mental functioning, causing great distress and placing a heavy burden on families and society[6]. Cancer patients experiencing persistent pain can become desperate, believing that the pain is a complication and an exacerbation of a deadly disease.

Pain is a complex experience of discomfort consisting of physiological and psychological responses to noxious stimuli and is primarily associated with injury or fear of injury[8]. Pain in cancer patients usually begins at the time of diagnosis and persists throughout the course of the disease. Although pain is subjective, physical pain remains a major source of suffering and can be easily assessed using validated equipment. Reports from developed countries indicate that the prevalence of pain at cancer diagnosis and early in the disease course is generally estimated at about 50%, rising to 75% in advanced stages[9]. Pain in cancer patients has a prevalence of 64% in patients with metastatic, advanced or terminal disease, 59% in patients undergoing cancer treatment, and 33% in patients after curative treatment. Study showed that people over the age of 60 were more than twice as likely to be hospitalized for persistent pain-related conditions as those under the age of 59[8].

Quality of life is greatly affected by pain in almost all cancer patients, and physical activity primarily affects sleep, appetite, relationships, emotions, and visual activity[10]. Cancer pain causes a great deal of suffering for patients, but it also places a heavy burden on families and society as a whole[4].

Pain in cancer patients should be managed in a multidisciplinary setting with a combination of pharmacological and non-pharmacological interventions by team members from different disciplines. The study therefore focuses on aspects of the nursing team as part of a multidisciplinary team in cancer pain management[11]. As part of a multidisciplinary team, nurses play a key role in cancer pain management. They need to actively intervene to fully control and relieve pain through non-

pharmacological approaches and be aware of pharmacological treatments, indications, contraindications and side effects[12].

The main goals of cancer pain treatment are pain control and relief, reduction of side effects and costs, increased autonomy and performance in activities of daily living, including psychological aspects, and improved quality of life. Clinical practice guidelines recommend that pain assessment and management in cancer patients is of critical importance at all stages of the disease[13]. The nurse's approach to cancer pain begins with an assessment. Accurate and consistent pain assessment using validated assessment tools is the first step towards effective and individualized treatment[12]. Three tools have been suggested for use in assessing pain intensity that is Visual Analogue Scales, Oral Rating Scales, and Numerical Rating Scales. However, if cognitive function is severely impaired. Self-reporting pain becomes difficult when people are old, have poor communication skills, or are at the end of life[14]. Observations of pain-related behaviour and discomfort can be used as a surrogate assessment tool for pain, although this has not been validated in this case[10].

This assessment will include a comprehensive pain assessment to determine a treatment plan, including discomfort for neuropathic pain symptoms (burning, tingling, numbness)[10]. Assessment-based interventions; reassessment of pain, and adjustment of treatment plans as needed. Pain prevention is another step in cancer pain management, involving continuous monitoring of pain levels and physical function, use of multimodal analgesia, and appropriate analgesics to prevent episodes of severe pain. Intervention-based research is another approach to treating cancer pain: that is conducting studies to test pharmacological and non-pharmacological strategies, elucidate patient perspectives through qualitative research, and assess practices through quality improvement studies.[14] Evidence-Based Practice; utilize current best evidence to guide practice, Consistent use of clinical practice guidelines for cancer pain and palliative care, Educate and encourage colleagues to incorporate evidence-based practice into their daily practice. Family-centered care and education: Encourage self-management and involve family members in patient-centered pain care, Assess educational needs and barriers to pain management[17]. Utilize interventions such as coaching, counselling, and knowledge-based approaches to improve pain control palliative care, identification and management for syndromes pain such as breakthrough and neuropathic pain, use alternative therapies to improve pain management, and support patient/family with psychosocial needs and resolution with end-of-life processes[11]

Materials and methods

Cross-sectional descriptive survey was adopted for the study. This was used to access knowledge and approach on cancer pain management among nurses, The study was conducted in 3 secondary health care facilities in Akwa Ibom State which include: Immanuel General Hospital, Ikot Ekpene General Hospital and Ibom Specialist Hospital. The target population consisted of all registered nurses that were working in oncology related department of the selected facilities with a total of 88 nurses. The study involved the total population, thus there was no sampling carried out. All the 88 registered nurses were consecutively recruited for the study.

Instrument for data collection: The study obtained data through the use of revised Nurses Knowledge and Attitudes Survey Regarding Pain (NKASRP) and observational check list. The instrument was divided into

three (3) sections: A–C. Section A was designed to gather information relating to the socio demographic and educational background of the respondents. The revised Nurses Knowledge and Attitudes Survey Regarding Pain (NKASRP)[15] was adapted in section B for knowledge assessment of nurses. However, this instrument was modified by the researchers in order to fit the study similar to Nega, Tachbele and Kassa[16]; who used same approach. Observational check-list developed by Smeltzer, Bare, Hinkle and Cheever[17] was used in Section C to observe and assess the approach used by nurses in managing cancer pain and had been previously used by Attahir[18] to determine nurse approach on elderly patient in cancer pain management. Face and content validation of the instrument was carried out by experts in the field of Nursing, oncology, their input were utilized in modifying the tool before the actual field use. The reliability of this instrument was pre-tested on nurses at General Hospital Iquita, Oron, Akwa Ibom State, which has similar characteristics with the study population. to test for the internal consistency and reliability, Cronbach alpha was used. This yielded a value of 0.833 which showed a high consistency

Data collection: Data was collected over a period of 4 weeks.

Ethical Approval and consent to participate: Ethical approval was obtained by the Akwa Ibom state Ministry of Health ethics and research committee, informed oral consent was obtained from the respondents before administering the instrument and observations and confidentiality of the data collected was ensured

Data analysis: Data were summarized and analysed using descriptive statistics of mean, frequency and percentage and chi-square was used to compare the approaches render by nurses for cancer pain management and the result were presented in tables. Level of significant was set at less than 0.05.

Results and Discussion

Findings from this study shows the many (25%) of the respondents were aged 46 years and above; majority (89.8%) of the nurses were females: predominantly Christians (97.7%) and mostly married (79.6%). About 39 (44.3%) of the nurses working experience were between 5-10 years. The educational qualifications of Nurses that participated in the study; majority had Registered Nurse and Midwife qualification (RN/RM) with 42%, followed by Bachelor of Science Degree (BSc) with 33%. However, most (35.2%) of the nurses did not have additional cancer/pain related training and majority(35.2) of the respondent had only basic nursing knowledge.

Findings shows that majority (72.70%) of the participants had adequate knowledge of cancer pain management. The highest correct responses (97.70%) by nurses is on the item number 8 which asked about if the patients' spiritual beliefs may condition their minds to believe that pain and suffering are necessary experience of life. The decision table (table 3); which was showed nurses' level of knowledge toward cancer pain management. Poor knowledge (27.30%) was recorded in less than one third of the participants.

Findings from the study shows 2 out of 10 approaches were carried out satisfactorily; 5 approaches were utilized but not with satisfaction. Three approaches were not utilized by majority of the respondents.

The level of knowledge of nurses based on the study revealed that more than half of the nurses (72.70%) have adequate knowledge on cancer pain management in the care of cancer patients. Although, majority of the nurses has only basic nursing training and no further training on general or cancer pain management. This is contrary to previous

findings by Elumelu et al[19] in which only 2 (2%) nurses out of 119 could give a good account on the management of cancer pain. This finding agreed with that of Attahir[18] which opined that nurses are required to possess knowledge regarding pain management generally and on cancer. This will be of great benefit for the nurses to effectively plan nursing activities so as to ensure that pain is fully managed according to its subjective occurrence.

On the approaches employed by nurses during cancer pain management, the participants demonstrated unsatisfactory utilization of the approaches in managing cancer pain in cancer patient. Nevertheless, some approaches were optimally applied than some. Those that were most utilized by more than 70% of the participate included administering balanced and analgesic agent as prescribed, obtaining additional prescriptions as needed and instructing patient and family about potential side effects of analgesic agent. Other approaches which were carried out by less than 50% satisfaction included reassuring patient that pain is real, using pain assessment scale, assessing and recording pain characteristics, re-administering pain assessment scale after administration of pain medication, identifying and encouraging patients to use strategies and teaching patient additional strategies to relieve pain and discomfort. Management of cancer pain protocol should always be practised while taking care of cancer patient experience pain. Nurses should ensure pain assessment are made and the strategies components of the cancer management are well established.

Table 1: Socio-demographic and Professional Characteristics of the Nurses

Variable	Frequency	Percentage
Age (Years)		
21-25	2	2.3
26-30	22	25
31-35	20	22.7
36-40	19	21.6
41-45	14	15.9
46+	11	12.5
Gender		
Female	79	89.8
Male	9	10.2
Religion		
Christianity	86	97.7
Others	2	2.3
Marital Status		
Divorced	1	1.1
Married	70	79.6
Separated	2	2.3
Single	13	14.8
Widowed	2	2.3
Highest Qualification		
BSc	29	33.0
MSc	12	13.6
Registered Nurse	1	1.1
Registered Nurse and Midwife	37	42.1
Others	9	10.23
Cadre		
ACNO	19	21.6
AD	1	1.1
CNO	6	6.8
NO1	10	11.4
NO11	1	1.1
PNO	31	35.2
SNO	20	21.7
Years in Service		
Below 2 years	-	-
3 – 10 years	39	44.3
11 – 20 years	24	27.3
21 – 30 years	17	19.3
31+ years	5	5.7
Additional cancer and/or pain management and assessment training		
General Pain Management	30	34.1
Oncology	21	23.9
Palliative	6	6.8
None	31	35.2

Table 2: level of knowledge of cancer pain management among Nurses

S/N	Variable	Response (%)		
		True	False	Answers
1	Vital signs are always reliable indicators of the intensity of a patient pain.	32 (36.4%)	56(63.6%)	F
2	Patients who can be distracted from pain usually do not have severe pain.	42 (47.7%)	46(53.3%)	F
3	Aspirin and other non-steroidal anti-inflammatory agent are not effective for painful bone metastases.	27(30.7%)	61(69.3%)	F
4	Patients may sleep in spite of severe pain.	68 (77.3%)	20(22.7%)	T
5	Respiratory depression rarely occurs in patients who have been receiving stable doses of opioids over a period of months.	63 (71.6%)	25 (28.4%)	T
6	Combining and analgesic that work by different mechanism (e.g., combining an NSAID with an opioid) may result in better pain control with fewer side effects that using a single analgesic agent.	71 (80.7%)	17 (19.3%)	T
7	The usual duration of analgesia of 1-2 mg morphine IV is 4 to 5 hours.	19(21.6%)	69 (78.4%)	F
8	Patient spiritual beliefs may condition their mind to believe that pain and suffering are necessary experience of life.	86 (97.7%)	2 (2.3%)	T
9	If the source of the patient's pain is unknown, opioid should not be used during the pain evaluation as this could Mask the ability to correctly diagnose the cause of pain.	39 (44.3%)	49 (55.6%)	F
10	Elderly patient cannot tolerate opioids for pain relief.	18 (20.5%)	70 (79.6%)	F
11	Giving patients sterile water by injection (placebo) is a useful test to determine if the pain is real.	22(25.0)	66(75.0%)	F

Table 2B: decision table- Rating Nurses level of knowledge toward cancer pain management.

Variable	Frequency	Percent (%)
Poor Knowledge	24	27.30
Excellent Knowledge	64	72.70
Total	**88**	**100.0**

Table 3: Observational check list on Nursing care approach for a patient with cancer pain

Variable		Frequency	Percent	Mean	p-value
Reassure patient that pain is real	Not Done	25	28.41	2.95	<0.001*
	Done not Satisfactorily	47	53.41		
	Done Satisfactorily	16	18.18		
Use pain assessment scale	Not Done	14	15.91	1.11	<0.001*
	Done not Satisfactorily	62	70.45		
	Done Satisfactorily	12	13.64		
Assess and record pain characteristics	Not Done	-	-	2.05	<0.001*
	Done not Satisfactorily	51	57.95		
	Done Satisfactorily	37	42.05		
Administer balanced and analgesic agent as prescribed	Done not Satisfactorily	2	2.27	3.0	<0.001*
	Done Satisfactorily	86	97.73		
Re-administer pain assessment scale	Not Done	70	79.55	1.0	<0.001*
	Done not Satisfactorily	14	15.91		
	Done Satisfactorily	4	4.55		
Document severity of patient pain on chart	Not Done	9	10.23	2.14	0.001*
	Done not Satisfactorily	25	28.41		
	Done Satisfactorily	54	61.36		
Obtain additional prescriptions as needed	Not Done	2	2.27	1.27	0.001*
	Done not Satisfactorily	5	5.68		
	Done Satisfactorily	81	92.05		
Identify and encourage patients to use strategies.	Not Done	53	60.23	1.68	0.030
	Done not Satisfactorily	22	25.00		
	Done Satisfactorily	13	14.77		
Teach patient additional strategies to relieve pain and discomfort.	Not Done	64	72.73	1.82	0.740
	Done not Satisfactorily	16	18.18		
	Done Satisfactorily	8	9.09		
Instruct patient and family about potential	Not Done	9	10.23	1.78	0.047

side effects of analgesic agent.			
	Done not Satisfactorily	15	17.05
	Done Satisfactorily	64	72.73

Conclusion

In this study, there were knowledge gaps although the nurse had excellent knowledge but there was suboptimal utilization of cancer pain management approach among nurses in the health facilities. Cancer pain management is one of the major problems faced by cancer patient and the need of pain reduction cannot be overemphasized. The pains can be managed if the approaches are duly followed.

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Competing interest

There exists no conflict of interests

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