

## Exploring Nurses Knowledge, Attitude in Pain Management for Palliative Patients In Oncology Hospital Khartoum State.2023

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### Abstract

Pain is the greatest concern of patients in critical care units (CCUs). Uncontrolled pain triggers physical and emotional stress responses, inhibits healing, increases the risk of other complications, and increases the length of CCU stay. Most critically ill patients (CIPs) experience moderate to severe pain. **Aim:** This study aimed to explore the nursing staff's knowledge and attitudes regarding pain management in In Oncology Hospital Khartoum State.2023. **Design:** An exploratory descriptive cross-sectional survey. **Methods:** The study was conducted between from January 2023-february 2023 among nurses in In Oncology Hospital Khartoum State, completed the nurses' knowledge and attitude Survey Regarding Pain among palliative patients. **Results:** The nurses had an adequate good level of knowledge and attitudes regarding pain based on the average mean score for this factor, scores were classified into Poor knowledge ( $\leq 50\%$ ), Fair knowledge (51- 75%), and ( $\geq 76\%$ ) considered Good knowledge. . There was a statistically significant correlation between socio demographic data and their knowledge and attitude. Conclusion and recommendation: Nurses explored good levels of knowledge and attitude towards pain treatment management among palliative patients. The findings also suggested that the length of time a nurse has spent working as a registered nurse is a significant factor in determining how well the nurse handles pain.

**Keywords:** Attitude, knowledge, nurses working in oncology hospital,pain management, oncology hospital, Khartoum state.

### 1-Introduction:

Pain is the greatest concern of patients in critical care units (CCUs). Uncontrolled pain triggers physical and emotional stress responses, inhibits healing, increases the risk of other complications, and increases the length of CCU stay. Most critically ill patients (CIPs) experience moderate to severe pain (Chelazzi, Falsini, & Gemmi, 2018).

Cancer patients will experience pain at some time or other. This pain can be due to cancer's direct damage to the body or from the treatment (Toba HA. 2019).

Pain prevalence in cancer patients increases with the progression of the disease. It has been reported that 20%–50% of the patients with cancer experience the pain at first admission; about 30%–40% of them experience the pain during the treatment; and 60%–70 % of them experience the pain at terminal stage. Besides,

33% of the cancer patients whose treatment is finalized experience chronic pain (Uysal N. 2019).

Generally, cancer patients diagnosed at a later stage experience various symptoms that significantly impact their quality of life, with pain being one of the most prominent. Unfortunately, access to adequate cancer pain relief remains a substantial problem worldwide. The 2015 Quality of Death Index ranked many Middle Eastern and East African countries at the bottom of the scale in terms of palliative care, including pain management. (Economist Intelligent Unit.2015)

Nurses, being the largest group within the healthcare team, play a crucial role in cancer care. (Ferrell, B.R.; McCaffery, M. Knowledge and Attitudes Survey Regarding Pain; City of Hope: Duarte, CA, USA, 2014. )They often serve as the primary point of contact for patients and families. Nurses are instrumental in evaluating and managing cancer pain, and their level of

knowledge, expertise, and attitudes significantly impact the quality of pain control (**Reis-Pina, 2017**)

However, research indicates that nurses working with cancer patients often lack the necessary training and knowledge for effective pain management. This leads to inadequate pain relief, increased patient suffering, and prolonged hospital stays (**salim, N. 2017**)

Due to the world's aging society, and rising of cancer and other non-communicable diseases, the need for palliative care is expanding quickly. Palliative care aims to maintain the highest patient's quality of life and their families who face a life-threatening disease problem. (**Achora et al., 2019**)

Cancer is one of the leading causes of death worldwide. It is estimated that the global cancer burden will even grow in years to come and will reach 21.4 million new cases and 13.2 million deaths by 2030 (**Ferlay J, et al., 2010**).

Nurses will meet individuals who need palliative or end-of-life treatment, regardless of their job environments. Not only because they spend the most time with patients, but also because of the positions they perform, nurses form an integral component of the palliative care staffs (**Lindley LC., et al. 2017**).

### Prevalence in Sudan:

While cancer epidemiology is well investigated in developed countries, the cancer burden in Africa is less well documented. We provide cancer statistics of 33,201 patients from all Sudan diagnosed at the Radiation and Isotope Centre in Khartoum (RICK). This hospital covers approximately 80% of patients with cancer in Sudan and is, therefore, considered representative for the situation in this country (**Mohamed E.M. et al., 2016**)

There were an estimated **1 234** new cases of cervical cancer in 2023, resulting in an age-standardised incidence rate of 8.6 per 100,000 women. In the same year, an estimated **738** women died from the disease, resulting in an age-standardised mortality rate of **5.2** per 100,000 women.<sup>5</sup> It is predicted that without any intervention, a total of **33 345** women in Sudan will die from the disease between 2020-2070, rising to **48 947** by 2120. (**Ginsburg O.**

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### Justification of the study:

From our experience in clinical practice, cancer patients still complain of severe pain despite advanced technology and highly qualified staff involved. Moreover, revising patients' medical records revealed high severity scores of pain very old research for Kelman's theory of Knowledge Attitude/Brief Practice (KABP) emphasizes that both knowledge and attitude influence behavior, with knowledge serving as the foundation and behavior being driven by attitude (**Kelman, H.C.1980**).

On other hand a productive nurse-patient partnership requires nursing care to have attitudinal, emotional, and holistic aspects that go well beyond medical procedures and practices. This enables nurses to have a mix of equally responsive, significant, and flexible expertise, skills, and positive attitudes, therefore, it is important to evaluate nurses' knowledge and attitudes regarding cancer pain management in order to better understand their behavior.

This study aims to assess the general knowledge and attitude of nurses involved in the care of cancer patients in oncology hospital in Khartoum state regarding cancer pain assessment.

### Research Question:

- What is Nurses knowledge level, attitude level regard pain assessment for cancer patients?
- Is there any relation between their knowledge, attitude and their socio economic data?

### 2-Methods:

**2.1 Study design:** this is exploratory cross sectional hospital based was used for conducting the study.

### 2.3 study area:

This study conducted in oncology hospital Khartoum state 2023 from January 2023-february 2023.(oncology hospital) is the Radiation and Isotope Centre in Khartoum (RICK). This hospital covers approximately 80% of patients with cancer in Sudan and is, therefore, considered representative for the situation in this country.

**2.3 Study Setting:** The data were collected from Nurses in Medical wards, and emergency setting in oncology hospital Khartoum state.

**2.4 Study period:** The study was conducted between from January 2023-february 2023

**2.5 Study Sample:** sampling selected by systematic random sampling sample consisted of 45 nurses, who work in the previously mentioned settings invited to participate in the study

**2.6 The inclusion criteria:**

- Both sex with full time employment with different qualification certificate level.
- Accepted to participate in the study

**2.7 Exclusion criteria:**

Those who refused to participate in the study.

**2.8 Tool of the study:** For data collection a self-administrative questionnaire was developed by researchers and used to assess:

- a. Nurses' socio-demographic characteristic as regards their age, gender, Nursing Qualification, working experience.
- b. Participants' knowledge was assessed as follows: each question response by yes.no and I don't know ,for each correct answer; incorrect or I don' t know answer took zero. Correct responses were summed up to get a total knowledge scores for each participant. Total score for all questions reached 23 grades. The knowledge scores were classified

into Poor knowledge ( $\leq 50\%$ ), Fair knowledge (51- 75%), and ( $\geq 76\%$ ) considered Good knowledge.

- c. Attitude was assessed using a 5-item Likert scale (ranging from strongly agree 5 to strongly disagree, 1). Six of the items were worded positively and six were worded negatively. It had 12 item rating scale with the highest score of 5 for each option and total possible score was 60. The attitude scores were categorized into good ( $\geq 76\%$ ), moderate (51-75%), and poor ( $\leq 50\%$ ).ALL questionnaire send vai google form then send back to the author.

**2.9: Data analysis:**

Data gathered organized coded and entered using Social Sciences (SPSS) (version 26). Descriptive statistics such as means, standard deviation, percentages and frequencies were used to describe the sample characteristics and their responses. The inferential statistic using chi square to correlate socio demographic data with dependent variables, knowledge attitude **p** value 0.05 considered as significant association.

**Ethical considerations:**

Before starting the study ethical approval was obtained ,written consent were taken from participants after explaining the purpose of the study and explained that it has no any risks for them and they have right to withdraw from the study at any time without giving any reasons.

**Results:**

**Table (1):** Socio demographic data

no (45)

Variable	Frequency	Percent(%)	Mean	SD
Age by years				
25-30	23	51.1	1.4889	.50553
more than 30	22	48.9		
gender				
male	22	48.9	1.5111	.50553
female	23	51.1		
qualification level				
BSc	7	15.6	2.0000	.56408
MSc	31	68.9		
PhD	7	15.6		
Years of experience				
5 years	26	57.8	1.4222	.49949
More than 5 years	19	42.2		

**Table (2):** Responses of nurses knowledge on Pain Management for palliative patients no (45)

Item	Yes	No	I don't know
Vital signs are always reliable indicators of the intensity of a patient's pain	7(15.6%)	35(77.8%)	3(6.7%)
Because their nervous system is underdeveloped, children under two years of age have decreased pain sensitivity and limited memory of painful experiences.	4(8.9%)	39(86.7%)	2(4.4%)
Patients who can be distracted from pain usually do not have severe pain	45(100%)	0	0
Patients may sleep in spite of severe pain.	37(82.2%)	4(8.9%)	4(8.9%)
Aspirin and other nonsteroidal anti-inflammatory agents are NOT effective analgesics for painful bone metastases.	13(28.9%)	27(60%)	5(11.1%)
Respiratory depression rarely occurs in patients who have been receiving stable doses of opioids over a period of months.	38(84.4%)	3(6.7%)	4(8.9%)
Combining analgesics that work by different mechanisms (e.g., combining an opioid with an NSAID) may result in better pain control with fewer side effects than using a single analgesic agent	33(73.7%)	7(15.6%)	5(11.1%)
The usual duration of analgesia of 1–2 mg morphine IV is 4–5 h.	7(15.6%)	20(44.4%)	18(40%)
Opioids should not be used in patients with a history of substance abuse	7(15.6%)	34(75.6%)	4(8.9%)
Elderly patients cannot tolerate opioids for pain relief..	3(6.7%)	36(80%)	6(13.3%)
Patients should be encouraged to endure as much pain as possible before using an opioid..	45(100%)	0	0
Patients' spiritual beliefs may lead them to think pain and suffering are necessary	45(100%)	0	0
Children less than 11 years old cannot reliably report pain so nurses should rely solely on the parent's assessment of the child's pain intensity	13(28.9%)	24(53.3%)	8(17.8%)
After an initial dose of opioid analgesic is given, subsequent doses should be adjusted in accordance with the individual patient's response	32(71.1%)	6(13.3%)	7(15.6%)
Giving patients sterile water by injection (placebo) is a useful test to determine if the pain is real.	10(22.2%)	31(68.9%)	%)
Vicodin (hydrocodone 5 mg + acetaminophen 500 mg) PO is approximately equal to 5-10 mg of morphine PO	35(77.8%)	7(15.6%)	3(6.7%)
If the source of the patient's pain is unknown, opioids should not be used during the pain evaluation period, as this could mask the ability to correctly diagnose the cause of pain	3(6.7%)	39(86.7%)	3(6.7%)
Anticonvulsant drugs such as gabapentin (Neurontin) produce optimal pain relief after a single dose	0	41(91.1%)	4(8.9%)
Benzodiazepines are not effective pain relievers unless the pain is due to muscle spasm	44(97.8%)	0	1(2.2%)
The time to peak effect for morphine given IV is : (15 min)	30(26.7%)	15(33.3%)	0
Mean knowledge level	frequency		Percent (%)
Good knowledge ( $\geq 76\%$ )	42		93.3%
Fair knowledge (51- 75%),	3		6.7
Poor knowledge ( $\leq 50\%$ )	0		0

**Table (3):** Attitude of nurses regard palliative patients

no (45%)

Item	Strongly disagree	disagree	Not decided	Agree	Strongly agree
Palliative care is given only for dying patient	4(8.9%)	0	6(13.3%)	25(55.6%)	10(22.2%)
As a patient nears death; the nurse should withdraw from his/her involvement with the patient;.	4(8.9%)	13(28.9%)	14(31.1%)	9(20.0%)	5(11.1%)
It is beneficial for the chronically sick person to verbalize his/her feelings.	0	0	1(2.2%)	3(6.7%)	41(91.1%)
The length of time required to give nursing care to a dying person would frustrate me.	4(8.9%)	4(8.9%)	7(15.6%)	28(62.2%)	2(4.4%)
Family should maintain as normal an environment as possible for their dying member.	0	0	0	45(100%)	0
The family should be involved in the physical care of the dying person <sup>7</sup> . It is difficult to form a close relationship with the family of a dying member.	0	0	0	45(100%)	0
It is difficult to form a close relationship with the family of a dying member	0	0	0	45(100%)	0
Nursing care for the patient's family should continue throughout the period of grief and bereavement	2(4.4%)	3(6.7%)	6(13.3%)	27(60%)	7(15.6%)
Nursing care should extend to the family of the dying person	0	3(6.7%)	2(4.4%)	15(33.3%)	28(62.2%)
When a patient asks, "Nurse am I dying?"I think it is best to change the Subject to something cheerful.	18(40%)	0	2(4.4%)	11(24.4%)	14(31.1%)
I am afraid to become friends with chronically sick and dying patients	0	2(4.4%)	4(8.9%)	16(35.6%)	23(91.1%)
I would be uncomfortable if I entered the room of a terminally ill person and found him/her crying.	0	0	0	9(20%)	36(80%)
Mean attitude level	frequency		Percent (%)		
Good attitude (≥76%)	44		97.8		
Fair attitude e (51- 75%),	1		2.2		
Poor attitude (≤50%)	0		0		

**Table (4):** Mean, SD p value for nurses knowledge and attitude

item	Mean	SD	P value
knowledge	3.9778	.30277	.550
attitude	3.9778	.30277	.550

**Table (5):** Correlation of characters and socio demographic data chi square distribution

items	Demographic variable	P value
knowledge	age	.975
	gender	.589
	qualification	.036
	Experience	.054
attitude	age	.002
	gender	.367
	qualification	.275
	Experience	.939

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**Discussion:**

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Inadequate management of cancer pain and the inappropriate use of opioids in cancer patients are significant public health concerns. **(Beauchemin, M.et al., 2021)**

Insufficient pain control can lead to preventable complications and escalate the cost of cancer care, while the misuse of opioids can result in severe side effects and addiction. Previous research has highlighted the critical role of healthcare professionals, particularly nurses, in ensuring the effective management of cancer pain. **(Reis-Pina, P et al., 2017)**

This exploratory cross-sectional hospital based study explored nurses knowledge, attitude In Pain Management for Palliative Patients in Oncology Hospital Khartoum State.

From results both sex were enrolled in the study their age between (25-30 years) 23 (51.1%) while this percent represented as female nurses. their education level majority of them with master 31 (68.9%) degree and the reset with PhD and diploma certificate only same degree 7 (15.6%).all these social characteristics came in same results with study done by **(Suha Omran et al., 2014)**.

This study revealed that nurse have good knowledge regard pain management for palliative patients and their mean knowledge 42(93.3%) which is high percent and this indicate most of participants know very well how to manage patient in his end life this finding in consistent with study done with other studies conducted in the Middle East, where knowledge scores ranged from (45.1% to 66%) **(Shahriary, S.et al., 2015)**. Even in the USA, the score was found to be (64.6%) **(Brant, J.M.et al., 2017)**.

Again our participants reported good knowledge this opposite to study done in Azad Kashmir, Pakistan their finding reflect poor knowledge of their participants, and they concluded that the level of knowledge of the nurses participated in the study were not up to the required standards, and suggested to a dire need to motivate and facilitate nurses for continuation of professional education programs to prepare them for the proper training of pain management that in turn will

help to vanish the miseries of patients resulting in terms of having pain. **(Shuaib N. 2018)**

Also study done in Suadi Arabiashowed nursesparticipated in their study had an inadequate level of knowledge and attitudes regarding pain based on the average mean score for this factor  $12.755 \pm 2.938$  (SD). **(Als Salman, Aminah.et al. (2023)**,even in study done in Turkey they reported that nurses' knowledge showed poor results about knowledge level of nurses that was calculated as (35.41%). **(Yildirim YK, et al., 2008)**

On other hands our participants reported good attitude towards pain management among palliative patients which represent 44(97.8%) this supported by previous study conducted in Saudi Arabia found that expat Nigerian nurses had the highest scores on the knowledge and attitude towards pain management. **(Eid et al., 2014)**

Also our study unsupported by study done in Jordan,where their results concluded that the average score for knowledge and attitude was 52%. **(Darawad et al., 2019)**

Regard correlation between socio demographic data between knowledge and attitude our finding achieved the answered research question and there is significant co relation ,this in contrast to **(Samarkandi, 2018)**, where their finding reported significant differences in the levels of knowledge and attitude towards pain management scores among the nurses in relation to gender, age, level of education, whether the nurses have previously attended pain management

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**Conclusion and recommendation:**

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knowledge and attitude among nurses in cancer pain managementis a significant challenge in providing comprehensive cancer care.this study aimed to explore the levels of knowledge and attitude towards pain treatment management among palliative patients in oncology hospital in Khartoum state it was determined that the nurses who participated in this study had sufficient good levels of knowledge and attitude towards pain treatment. The findings also suggested that the length of time a nurse has spent working as a registered nurse is a significant factor in determining how well the nurse handles pain.

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