

Cancer-Related Pain Assessment Practices among Nurses: A Focused Ethnography in a county Referral Hospital in Kenya

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Abstract

Introduction: Up to 80% of cancer patients in Kenya continue to experience untreated moderate to severe pain. A key step for nurses in the management of cancer pain is conducting a comprehensive assessment. This study explored cancer-related pain assessment practices among nurses in Kenya.

Methods: A focused ethnographic approach, twenty-five ($n=25$) participants were recruited using purposive, snowballing sampling strategy from an oncology and private ward in a large teaching and referral hospital. Semi-structured interviews and observations were used to collect data. Content analysis was used to analyze the data.

Findings: Cancer-related pain assessments were not a routine practice in both wards. Assessments were triggered by patients' behavior, patient's verbal reports of pain, and during evaluation of the outcome of an intervention. Based on observations the ward culture influenced how nurses intervened. For instance, nurses in the oncology ward took patients verbal reports of pain into account unlike the nurses in the private ward who believed their observations were superior to patient's verbal reports.

Conclusion: To an extent pain assessment practices were influenced by the ward culture, patient's perspectives were not prominent. Tailored interventions taking into consideration the ward culture are needed to enhance pain assessment practices among nurses.

Key words: *Cancer, Kenya, nurses, pain assessment, ward culture.*

Introduction

The prevalence of cancer pain is higher in low- and middle-income countries compared to developed countries because most patients (88 - 95%) are often diagnosed with advanced forms of cancer, 70% of cancer deaths are associated with limited access to pain treatment (Bray et al., 2018; Li et al., 2018). Despite advances in policies, education, and pain management options, more than 50% of cancer patients continue to experience inadequate pain relief

(Neufeld et al., 2017; O'Brien et al., 2018; Haumann et al., 2017).

A comprehensive pain assessment is a useful first step in cancer pain management (CPM) (Fink & Brant 2018). A comprehensive pain assessment requires paying attention to patients reports of pain, and assessing the source of pain; evaluation of the effect of pain on the patient, and the effectiveness of previous pain management interventions. The effects of pain medications should also be included in the assessment (Swarm et al., 2019; Portenoy & Ahmed, 2018; World



Health Organization, [2019]). Cancer patients frequently experience pain due to the disease process or treatment, and nurses are responsible for assessing this pain (Gallagher et al., 2017). Therefore CPM is a fundamental routine task for nurses.

Over the years, the Kenyan government has prioritized communicable diseases regarding prevention, treatment, and allocation of funds (Ministry of Public Health & Sanitation, & Ministry of Medical Services [MPHS & MMS], 2011). In fact, the National Cancer Control Program (NCCP) established in 1994 for years was dormant in carrying out their mandate due to lack of funds. However, with the rising cases of cancer in Kenya cancer has started to receive government attention. In 2010, the Ministry of Health (MOH) through the NCCP developed a strategic plan to address cancer-related issues (MPHS&MMS, 2011). Among the issues is the provision of palliative care to improve patient's QoL (MOH, 2013). The development of national guidelines for cancer pain management were proposed in the strategic plan. Further, training of providers and increasing awareness among healthcare workers on the importance of pain management was recommended (MPHS&MMS, 2011). Also, based on the strategic plan, the integration of palliative care services into the national health services and ensuring essential drugs such as morphine are made available in the system was emphasized (MPHS&MMS, 2011). Lastly, the use of evidence-based approach to managing pain among cancer patients was echoed in this strategy (MPHS & MMS, 2011).

Studies show that, nurses often rely on their own observations to validate patients reports of pain (Chatchumni et al., 2016; De Silva & Rolls, 2011; LeBaron et al., 2014; Van Dijk

et al., 2017). A pain assessment should incorporate multiple aspects in order to make meaningful decisions when managing cancer pain (Pasero, 2016). The subjective nature of pain may hinder an accurate pain assessment (Gallagher et al., 2017) therefore collaboration between healthcare workers and patients is important in the management of cancer pain (Hemingway & Snowden, 2012; Snowden & Marland, 2012). Consequently it is important to consider all aspects of pain when assessing patients in order to manage cancer pain effectively.

Most patients (90%) with cancer pain can achieve pain relief if pain assessments are conducted using valid tools such as the Numeric Rating Scale (NRS) recommended in most CPM guidelines (Ali et al., 2013; Fink & Gallagher, 2019; Kasasbeh et al., 2017). However, known barriers to CPM such as poor adherence to pain management guidelines, lack of training of health care providers, and opiophobia (Carlson, 2016; Hamieh et al., 2018; Onsongo, 2019) impede effective CPM, complicating pain management further (Abed El-Rahman et al., 2012). Although, valid pain assessment tools exists, studies have shown that nurses often underestimate pain intensity reported by patients; nurses give preference to their personal judgments, based on patients behavior or patient appearance (Hamieh et al., 2018; Al Qadire & Al Khalaileh, 2014; Aziato & Adejumo, 2014).

Culture explains members' opinions, choices and activities, and has a significant influence on nurses' pain management practices (Bloch, 2017; Chatchumi et al., 2016). In general culture shapes tendencies to respond positively or negatively to patients' pain (Magnusson & Fennell, 2011; Narayan, 2010). Nurses' cancer-related pain assessment practices can facilitate or impede



the improvement of cancer patients' quality of life (QoL). Understanding the role of ward culture in pain assessment practices is key in improving and optimizing CPM.

Despite the numerous studies about pain assessment practices reported in the literature, studies evaluating the role of ward culture in cancer-related pain assessment practices among nurses managing cancer pain in Kenya are scarce. In addition, the professional assertion that the client's own description is the most reliable indicator of their pain, few researchers have studied the tangible approaches nurses use to assess cancer related pain. The objective of this study therefore was to explore cancer-related pain assessment practices employed by nurses in managing cancer pain across two wards within the same hospital. The specific research questions were: In what ways and to what extent does cancer pain assessment vary across two wards among nurses? & what is the impact of the ward culture context on cancer pain assessment practice?

This was part of a larger study whose primary objective was to explore the role of nursing subculture on CPM among nurses in Kenya. Barriers to CPM among nurses in the different wards have been reported elsewhere (Onsongo, 2019).

Methods

This is a qualitative study using a focused ethnographic approach. The primary field site was one of the public hospitals in Kenya. The hospital has a private wing and a general (public) wing. The general wing accounts for 90% of the beds in this hospital. Oncology patients are admitted in either the general oncology ward or private ward. Services in the oncology ward are

underwritten by the government. Admission to the oncology ward is through a referral from lower level hospital. Due to the high volume of patients, admission for inpatient services in the general ward can take several months. Admission to the private ward is faster but expensive. Patients in the private ward are admitted by private physicians. The pain assessment practices described below are based on in-depth interviews and observations collected during four months of field immersion by the author.

The study recruited nurses who provided care to cancer patients through purposive sampling and then snowballing. The first contact was through the nurse managers in both wards as requirement by the hospital administration. Nurses who provided more than half of their care directly to cancer patients and had worked in the respective ward for six months or more were included in the study.

The researcher explained the purpose of the study to the patients and nurses. Participants were allowed to ask questions and make a decision of whether they would like to participate. They were given 24 hours to make a decision as to whether they will participate. After agreeing to participate the purpose, procedures, risks, benefits, confidentiality protections, and the right to withdraw from the study was explained and discussed by the researcher. Once participants signed consent, we agreed on the shift the observations will be done and the day for the interview based on the nurses schedule. Participants were informed that participation is voluntary. The University's Institutional Review Board (IRB) and the Hospital's Ethics Committee approved this study. Consent was given by participants. Confidentiality was ensured by



deidentifying the research participants and pseudonyms were used for anonymity.

The researcher collected, transcribed and analyzed data. Semi-structured interviews were audio recorded with authorization from the participants. Open-ended questions were used to understand the pain assessment practices in the different wards. The nurses were asked to recall specific cancer-related pain assessments of a few patients and report what triggered the assessment process. Data from observations was used to check for similarities or differences with interview based data. Observations included nurses actions related to pain management. For example, the researcher documented how nurses interacted with patients and other providers on any issues related to cancer pain management such as the administration of pain medications, documentation of their actions, communication with patients or other providers, and reevaluation of patient following medication administration. To collect relevant information the researcher observed each nurse for three to four hour blocks in each ward on different days, shifts, during admissions, discharge, and change of shift including weekends. Notes were taken openly and dictated immediately after leaving the field and later transcribed, any words in Swahili were translated into English. Patients and nurses gave consent before the observations. All interviews were recorded using an audio recorder, with consent, and lasted for approximately 30-45 minutes. Interviews took place within the wards in the nurse manager's office since it was the preferred venue for the participants.

Qualitative content analysis by (Graneheim & Lundman, 2004) guided the analysis in this study through (1) immediate transcription for the whole interview and observation after it is complete, (2) reading

the whole transcribed text to gain a general understanding of its content, (3) determining the meaning wards and initial codes, (4) categorizing similar initial codes in more complete groups, and (5) determining the main theme for each category. Data collection and data analysis took place concurrently.

Descriptive validity was established by using participants' quotes. A reflection journal and an audit trail were kept. There were ongoing discussions with colleagues who have pain expertise during data collection and analysis process (Baillie, 2015; Creswell, 2013). My graduate advisory committee composed of members with qualitative and pain expertise were engaged throughout the process.

Findings

Nurses in both wards, during interviews acknowledge that first step in managing cancer pain is conducting a pain assessment however it "*depends on the patient's presentation*".

Table 1: Participants Demographic profile

Variable	N=25	%	
Gender	Male	6	24
	Female	19	76
Age	21-30	4	16
	31-40	8	32
	41-50	6	24
	51>	7	28
Work Status	Permanent	22	88
	Locum	3	12
Unit	Oncology	12	48
	Private	13	52
Education	Certificate (ERN)	6	24
	Diploma(RN)	9	36
	Baccalaureate (BScN)	9	36
	Higher Diploma	1	4



Evaluation of the level and type of pain a patient is experiencing are based on both subjective (*patients verbal reports*) and objective (*you can see the pain*) criteria. Nurses also conduct assessments to determine the intervention that is needed and to monitor and evaluate the effectiveness of the intervention as reflected in *Figure 1*.

A pain assessment is often triggered by signs observed by a nurse. Patients' presentation determines nurses' approach to CPM in both wards. If a patient does not present with behaviors associated with pain nurses will focus on other tasks. Nurses in both wards, have specific expectations on how patients should behave when they are in pain. Behaviors such as crying, inactivity, or restlessness are considered signs of pain.

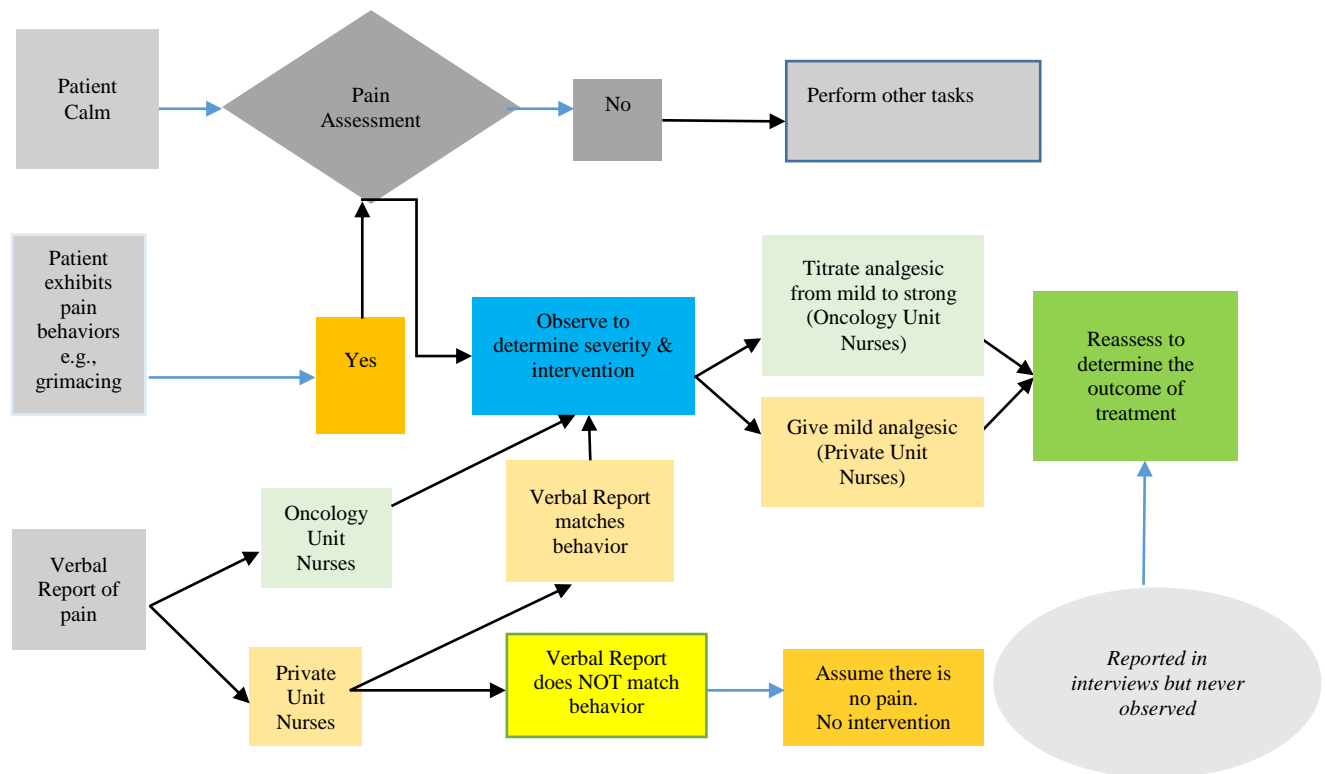


Figure 1: Nurses' cancer-related pain assessment practices

The total sample (n= 25; Table 1) comprised of nurses from both oncology and private wards. PUN and GUN below refers to a nurse working in the private and general ward respectively.

It depends on the patient's presentation

GUN3: "You can see the pain physically through their facial expression. When you look at a patient you can tell this patient is in pain, they don't talk as much. If a patient is not grimacing or something like that and they report that they are in pain, my assumption is that their pain is low".



PUN3: *“We look at how the patient is behaving. For instance, we observe to see if the patient is able to move himself or whether pain is limiting their movement.”*

Patients’ verbal reports versus nurses observations

Patient’s verbalization of pain is another trigger for pain assessment among nurses in both wards. In the oncology ward frequent verbal complains of pain by the patient alerts nurses that pain is not adequately managed.

GUN8: *“We base most of our assessments on patient’s verbal reports of pain”.*

GUN4: *“When the patient reports we listen very much, we must do something”.*

Nurses in the private ward also consider patients verbal reports during a pain assessment however, they give priority to objective criteria. Nurses disagree with verbal patients reports of pain when reported pain level does not match the expected behavior. Nurses believe that their observations of pain are more accurate than patient’s verbal reports.

PUN12: *“If a patient verbalizes pain, I will check if there is grimacing or something like that, because it’s so difficult to smile while you are in pain. There is no way one can have pain of 10/10 and they remain calm; you have to see something; I will determine the level based on my observation.”*

Nurses in both wards indicate that through observations they can determine the severity of pain. Nurses match certain behavior to a specific level of pain. For instance, if a patient is screaming the pain is rated as severe by the nurse. Some nurses indicate that the use of a pain a scale such as the NRS is not necessary, instead looking at the

general appearance is sufficient to determine the severity of pain.

GUN6: *“For severe pain you can even see patients crying, if you are in so much pain even you will cry or they become so restless.”*

PUN4: *“When you are talking to a patient you can see the agility of the patient or facial expression. A patient may not concentrate on a discussion because the pain is interrupting. As a nurse you are able to tell how much pain it is, you can tell whether it is mild or moderate or severe.”*

Determine appropriate interventions

Pain assessments are also done to determine the type of intervention to be administered. In both wards, the intervention is often pharmacological. However, there is a difference on type of analgesic that is offered. Nurses in the oncology ward state that they often refer to the WHO pain ladder as a guide.

GUN1: *“When they come initially we give them mild pain killers, maybe acetaminophen or Ibuprofen. If they are still complaining that the medication is not helping or that the level of pain has increased we can, combine paracetamol and a mild opioid. We start with a lower dose and increase as needed. If all these don’t work we will give morphine.”*

Although, nurses consider themselves knowledgeable in assessing cancer-related, they struggled on the most appropriate intervention for patients receiving multiple analgesics but continue to experience pain. Nurses consult the palliative team in such situations.



GUN11: *“Sometimes the patient is on morphine, gabapentin and other analgesics but they keep complaining of pain. You even start feeling like you also are in pain (laughs). It feels like your interventions are not working the pain is real. For example, that patient in bed 10 has a severe condition but he is not complaining of pain, but others complain a lot, yet their condition is not severe. Is it psychological or what kind of pain is it? So we inform the palliative team.”*

In the private ward nurses did not mention the use of the WHO pain ladder as a guide. Most patients are given mild analgesics. Morphine use was mentioned during interviews as an option but during observations it was rarely given, only two out of thirteen patients were given morphine for the duration of the study in the private wing. It was also observed that private ward nurses relied on the palliative team and physicians on issues regarding cancer pain regardless of the complexity.

PUN5: *“If the pain is not well controlled then we just involve the palliative care people for pain management or inform their primary physician.”*

Outcome of treatment

Nurses in both wards also indicate that, after administration of analgesics they reassess the patient to determine whether the analgesics were effective or not. Nurses’ reassess patients by observing the patients behavior following administration of analgesics.

GUN4: *“One of the main roles as a nurse in cancer pain management is monitoring after administration of analgesics, so we reassess*

the patients to see if the medication worked.”

PUN6: *“You are the one to evaluate after the patient gets pain medicine to see whether it is working, whether the patient is becoming restless or is responding to the treatment and also you have to check whether you need to taper down or top up.”*

Assessment of pain following administration of analgesics was reported during interviews but never observed by the researcher. Nurses were observed indicating patients response to analgesics especially morphine on the patients’ medical record without asking the patient whether they experienced improvement or not.

Discussion

The aim of the study was to investigate nurse’s cancer-related pain assessment practices when managing oncology patients across two wards. New insights and knowledge arose in the study concerning pain assessment practices in the Kenyan context.

Concerning nurses cancer-related pain assessment practices, I found that the nurses initiated pain assessments based on how the patients presented rather than with the explicit intention of assessing cancer pain. If patients did not show any pain related behaviors then nurses concentrated on other tasks. The ad hoc approach in assessment of cancer pain and the reliance of nurses own observations among nurses is not unusual. These findings are consistent with previous studies in other settings (Chatchumni et al., 2016; De Silva & Rolls, 2011; LeBaron et al., 2014; Van Dijk et al., 2017). Lack of training among health care providers in



evaluation and reevaluation of patients is a known barrier in African countries (Kasasbeh, McCabe & Payne, 2016; Carlson, 2016; O'Brien et al., 2018; Molyneux, 2012). Findings in this study confirm that systematic assessments are not part of the culture among nurses in this hospital.

Findings in this study show contrasting views on nurses' beliefs towards patient's self-report of pain. In the oncology ward nurses accept patients' reports of pain. While nurses in the private ward hold the view that patients must show observable signs of pain such as grimacing. Nurses in the private ward explained that if there was a discrepancy between the patient's verbalization of pain versus patient's behavior, they would prioritize their own observations and clinical judgment. It is important to note that most nurses in the oncology ward underwent palliative care training. Pain is a subjective experience consequently; a patient's self-report is the most reliable indicator for assessing the pain (Fink & Brant 2018). Other studies have shown that nurses often underestimate the pain intensity reported by their patients; they prefer to rely more on their personal judgments, based on patients behavior or patient appearance (Hamieh et al., 2018; Al Qadire & Al- Khalaileh, 2014; Aziato & Adejumo, 2014), even though pain is subjective. Since pain is a subjective experience, mediated only by the individual (Coghill, 2010) it is necessary to involve the patient in assessments of cancer pain. This might help explain why pain assessment in clinical practice represents an ongoing challenge for nurses in Kenya.

The preference of a subjective assessment of nurses over patient's self-reports of pain refutes the endorsement of the ethical

principles of autonomy and self-determination by the WHO as a fundamental human right (Hickey, 2011; McKinnon, 2013). When patients' verbalization of pain is not acknowledged as an important factor when making clinical decisions, the patients experience becomes subordinate to the healthcare provider (Hemingway & Snowden, 2012; Snowden & Marland, 2012). When patients are not considered as active participants in clinical decisions in healthcare a patriarchal relationship ensues leading to lack of satisfaction and poor outcomes (Paice & Von Roenn, 2014). This is not surprising considering that most patients who admitted in this hospital especially in the oncology ward consider themselves lucky to be admitted since they experience long waiting times to get a bed in this hospital.

In this study, valid assessment tools were not available to the nurses on either ward. Even though the use of validated tools leads to optimal pain relief for up to 90% of patients with cancer pain (Ali et al., 2013; Caraceni et al., 2012; Fink & Gallagher, 2019). Nurses in this study explained that they can determine the pain severity through observations. Previous studies have shown that, the most common reason for the under-treatment of cancer pain was the failure of healthcare providers to correctly assess pain, which leads to the underestimation of pain intensity (Paice & Von Roenn, 2014). A pain assessment using a validated tool is crucial in successful CPM since it provides a basis for deciding whether it is an issue for the patient and helps in recognizing its subjective nature (Greco et al., 2014, Fink & Gallagher, 2019). Undoubtedly, when nurses are assessing cancer pain, patients' accounts of pain should not be replaced by behavioral



observations of pain to determine pain intensity.

Although nurses in both wards agreed on pharmacological interventions to manage cancer pain they differed in their decision-making process in terms analgesics that should be administered. It is encouraging to note that nurses in the oncology ward are familiar with the WHO pain ladder for CPM. However, the application of the WHO guidelines was inconsistent in the oncology ward and non-existent in the private ward. Nurses in the private ward were comfortable giving only mild analgesics and referring other cases to palliative care. These findings are not unusual, other studies have reported that, notwithstanding, the advancement of pain management strategies, poor adherence to the WHO guidelines continues (Kasasbeh, McCabe & Payne, 2016; Carlson, 2016).

Pain assessment practices for cancer patients among nurses remains highly idiosyncratic yet it is vital to effective CPM. Variability in pain assessment practices among nurses may lead to underestimation or under-treatment of cancer pain. This study shows the role of ward culture in the pain assessment practices. This study took place in one government hospital in Kenya, and thus may be most relevant to similar care settings. The pain assessment practices reported by nurses in this study can apply generally to similar settings i.e., developing countries and may not be distinctive to public hospitals or to Kenya. For example, lack of a comprehensive pain assessments is likely to be relatable for most nurses in developing countries, regardless of specific practice setting.

The present study focused specifically on identifying nurses pain assessment practices in two wards, and asserts that the practice

can be enhanced when nurses in the same institution share the same beliefs, knowledge, skills, and attitudes towards CPM. This can be realized through uniformity in palliative care training and availability of pain management resources such valid pain assessment tools. Customized interventions are needed for specific wards to enhance nurse's pain assessment practices in managing cancer pain, taking into consideration the ward culture.

Conclusion and Recommendations

The study has implications for nursing practice in terms of pain assessments. One possible explanation why practice may differ within the same hospital is that interventions designed to improve pain assessment practice such as palliative care training may not succeeded fully. The limited success may be due to failure to take into consideration the ward setting. For instance, nurses working in a specialized oncology ward are more likely to attend palliative care training when compared to a nurses in a medical surgical ward even though they both provide care to cancer patients. This study suggests that a single intervention designed to change nursing practice is not likely to produce sustained change in practice. For instance, an individual nurse, with new knowledge concerning cancer pain assessment is less likely to dependably apply this knowledge in practice if it is not a common practice among other nurses in the same ward.

Targeted interventions that take into consideration the needs of nurses in a particular ward could potentially promote changes in practice which would be more likely have an impact for a longer period. Therefore, the findings of this study



recommend the significance of developing interventions that are ward specific and that can address the distinctive nature of nursing practice, and ward context depending on the specialization.

The study also has implications for future research, the current qualitative study focused specifically on identifying cancer pain assessment socially ingrained habits, skills and dispositions in the two wards under study. This process should be replicated on other wards. Finally, studies should be designed to test the hypothesis on whether ward culture can influence nursing practice.

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