

**CHRISTIAN SERVICE UNIVERSITY COLLEGE**

**DEPARTMENT OF NURSING**

**KNOWLEDGE, ATTITUDE AND BARRIERS TO EFFECTIVE CANCER PAIN**

**MANAGEMENT AMONG REGISTERED NURSES AT THE ONCOLOGY**

**DIRECTORATE OF KATH, KUMASI**

**BY**

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**A RESEARCH PROJECT SUBMITTED TO THE DEPARTMENT OF NURSING,  
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A BACHELOR OF SCIENCE (HONS) DEGREE IN NURSING.**

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## DECLARATION

We hereby declare that the work presented, except for references to other people's work which have been duly acknowledged, is entirely the product of our own effort carried out in the Department of Nursing, Christian service University College, (2015/16 Academic Year) under the supervision of Mr. John Antwi. This is an original research work which has neither in a whole nor in part been submitted anywhere for any other degree.

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## SUPERVISOR'S DECLARATION

I hereby declare that the preparation and presentation of this dissertation was supervised in accordance with the guidelines on supervision laid down by Christian Service University College.

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## **ABSTRACT**

The current study aimed to assess the knowledge and attitude of registered nurses and also barriers to effective cancer pain management at the oncology directorate of Komfo Anokye Teaching Hospital, Kumasi. The study was descriptive in nature and simple random sampling technique was employed in collecting data from respondents. A sample consisted of 15 registered nurses out of 18 working at the oncology directorate. A standardized questionnaire was used to collect data from respondents. The finding of this study indicates that nurses working at the oncology unit had good knowledge on cancer pain management with a mean score of 82.9%. Low level of knowledge was apparent in response to the pharmacology of opioids administered to cancer patients. In relation to their attitude, the results indicated that they had positive attitude towards cancer patients. They were willing to serve opioids to cancer patients, assess cancer patients' pain and also served opioids at a regular schedule and not only when the need arises. Fear of addiction and respiratory distress were identified by nurses as their major barrier in effective management of cancer pain. The study recommends that nurses must be educated continuously through educational sessions and workshops which focus on current cancer pain management and pain medication, their time of peak and indication. Advancing the knowledge base of nurses regarding pain management will improve outcomes for patients and will ultimately result in better end of life care.

## **DEDICATION**

Dedicated to our families for their immense support and love.

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## **CHAPTER ONE**

### **1.1 Background of the study**

Cancer is the leading cause of all morbidity and mortality according to the World Health Organization report on cancer 2014. It affects people at all ages with the risk for most types increasing with age (Wang et al, 2007). Cancer is a group of diseases in which cells display uncontrolled growth beyond the normal limits. These cells are invasive and sometimes metastasize. More than 60% of world's total new annual cases occur in Africa, Asia, Central and South America. Tobacco use is the most important risk factor for cancer causing around 20% of global cancer death and around 70% of global lung cancer death (WHO, 2014).

In Ghana, the WHO reported in 2014 that 210,000 people died as a result of cancer with the highest among females (52.4%). The most common causes of cancer deaths in Ghana are liver, prostate, breast, cervical etc. (World Cancer Report, 2014)

Pain is among the most common and distressing symptoms encountered by patients with advanced cancer and other terminal illnesses. Cancer pain is a multi-dimensional syndrome with a combination of acute and chronic pain that causes physical, psycho-social, behavioral, emotional, and spiritual problems, resulting in adverse effects on patients' quality of life (Hanks et al., 2011). Cancer pain is usually linked with tumor growth and the pressure it exerts on the surrounding tissues and nerves. Also, the cumulative effect of procedures undergone by cancer patients in the course of cancer management may result in pain.

There are different modalities of pain management and the outcome of each application depends largely on the skills exercised by the care giver, especially the Nurses who play major role in

patient's care in most health care delivery clinics. To be able to participate meaningfully in pain management, trained Nurses are expected to possess adequate knowledge to handle different types of pain in patients. Pain management is an integral part of patient's care and Nurses are the bed rock. . Therefore, the role of Nurses in pain management cannot be over emphasized. They are active participants in the entire clinical processes of pain management.

Managing pain in patients with cancer is possible; evidence indicates that 80 to 90 per cent of pain can be relieved by correctly following international guidelines for managing cancer pain (Foley, 2011). Despite the advancement in pain management techniques and the international prescribed guidelines for adequate pain management, studies have shown that patients with cancer continue to suffer from pain at different stages of their illness, mainly in the advanced phases (Al Qadire et al, 2013).

A study conducted by Yildirim et al, (2008) among 68 Turkish nurses to determine their knowledge level of pain management revealed that, there was significant knowledge deficit as the average correct response rate was 35%. A high percentage of nurses incorrectly answered questions relating to use of placebo, recommended routes of administration, the over-reporting of pain, addiction and an inability in making clinical judgments to determine course of treatment.

Elumelu et al, (2014) in their study aimed at assessing the level of knowledge of cancer pain management among trained Nurses at the University College Hospital (UCH), Ibadan, Nigeria reported that out of 119 nurses who served as respondents. 100 (84%) respondents gave correct definition of pain and out of these, only 2 (2%) could give a good account on the management for cancer pain. 24 (20%) of the respondent could use Visual Analogue Scale (VAS) for pain

assessment. Only 23 (19%) could state the relevance of opioids in cancer pain management. This study revealed inadequate knowledge in cancer pain management among the nurses.

From literature, many barriers have been identified to hinder the delivery of effective pain management to patients with cancer; this might be healthcare professional-related, healthcare system-related, or patient-related (Oldenmenger et al, 2009). Poor knowledge and negative attitudes towards pain management were reported as one of the most common barriers to effective pain management among nurses (Al-Khalaileh et al, 2012).

The above studies identified knowledge deficit among nurses with respect to cancer pain management. Therefore there is a need to assess the knowledge of nurses at the oncology unit taking care of cancer patients. This study will make an original contribution to nursing knowledge, as it explores knowledge and attitudes regarding oncology unit pain management. The findings established from this research will add to the understanding of nurses' knowledge of pain management at the oncology unit of KATH.

## **1.2 Problem Statement**

Effective pain management can be seen as an issue of primary importance for both nurses and patients. Relieving patients' pain and suffering is considered the primary responsibility of healthcare providers, including nurses as it is a fundamental human right for all patients (Jones, 2011). Although pain can be effectively managed, the under-treatment of pain continues to be a significant health problem. In hospital settings, studies showed that pain is inadequately managed and more than 73 per cent of hospitalised patients with cancer continue to suffer from unrelieved pain (Stockler & Wilcken, 2012).

The global literature has identified that, for more than three decades, nurses consistently demonstrated a lack of knowledge, along with differing attitudes and beliefs about pain and pain management (Hui et al., 2010). This has been identified as a significant clinical problem: relieving pain is a central goal of many oncology nursing interventions (Jones, 2011). Furthermore, it is argued that many of the frameworks, intervention protocols and assessment tools have not been effectively used by nurses to improve the care of patients experiencing pain (Lorenz et al., 2009).

Currently, no studies have been found that examined nurses' level of knowledge, attitudes and beliefs towards pain management at KATH oncology unit. In addition, no studies assessed the perceived barriers to effective pain management among nurses working in these oncology units. Therefore, it is worthwhile to address this gap in the literature. This will establish baseline information about nurses' current knowledge, attitudes and beliefs regarding pain management. Accordingly, examining the level of nurses' knowledge and attitudes towards pain management is a significant step in the process of improving pain management in oncology units. This will reflect positively on enhancing the quality of life of patients with cancer and hopefully decrease hospital admission rates.

### **1.3 Research Questions**

1. What is the level of knowledge that nurses working in KATH oncology units have regarding pain management?
2. What are the attitudes of nurses working in KATH oncology units towards pain management?
3. What is the perceived barrier that nurses working in KATH oncology units face in the delivery of effective pain management?

## **1.4 Main Objective of the Study**

To assess the knowledge and attitude of nurses at the oncology ward of KATH on cancer pain management and identify barriers that hinder the delivery of effective pain management to cancer patients.

### **Specific objectives**

- I.** Examine the level of knowledge of nurses on cancer pain management.
- II.** Examine the attitude of nurses at the oncology unit on cancer pain management.
- III.** Identify nurses - related barriers to cancer pain management at the oncology unit.

## **1.5 JUSTIFICATION OR RATIONAL**

Many studies have been conducted that examines nurses' knowledge and attitudes towards pain management. The vast majority of these studies have been conducted in western countries (Apolone et al., 2009; Lewthwaite et al., 2011; McNamara, Harmon & Saunders, 2012; Oldenmenger et al., 2009; Voshall, Dunn & Shelestak, 2013), while only a few studies have been conducted in Ghana.

This study originates from a need to investigate the current levels of nurses' knowledge, attitudes and practices and to explore the barriers to effective pain management at KATH oncology unit. Therefore, this study's findings will contribute new information concerning this area. Such knowledge is important to encourage improvements in the quality of nursing care for patients diagnosed with cancer.

Furthermore, this study aimed to identify barriers to effective pain management from the perspective of nurses working in oncology unit this will direct the institutional efforts to solve the problems that hinder effective pain management. Moreover, this study provides evidence-based data necessary for further development of nursing curricula for the undergraduate and postgraduate nursing programmes, as well as in-service education in hospitals. In addition, the study suggests an important area for future research concerned with improving the quality of care for patients with cancer. It recommends changes in healthcare institutional practices and policies regarding pain management.

### **1.6 Operational definition**

**Knowledge** – This is defined as the scored level of knowledge about pain management by nurses' working in the oncology unit at KATH

**Attitude** - The attitudes of nurses working in the oncology unit at KATH toward pain management practices.

**Barriers** – These are the obstacles to the delivery of effective pain management.



## **CHAPTER TWO**

### **2.0 LITERATURE REVIEW**

This chapter talks about researches that have been conducted to assess the knowledge, attitude and barriers to effective cancer pain management among nurses. It further looked at the difference in knowledge level between oncology and non-oncology nurses. Literature was obtained through journals and articles that have been published online.

### **2.1 KNOWLEDGE AND ATTITUDE OF NURSES ON CANCER PAIN MANAGEMENT**

Pain assessment and management is one of the major competencies of nurses providing care for patients diagnosed with cancer (Joint Commission, 2010). However, studies have reported that nurses tend to underestimate patients' pain (Aziato & Adejumo, 2014; Pasero & McCaffery, 2010). To achieve high levels of competency and provide good pain management, nurses need an adequate knowledge and positive attitude towards cancer pain assessment and management. Many studies have been conducted globally that assessed the knowledge of nurses on cancer pain management.

Rushton et al. (2003) in Utah (USA) investigated the knowledge and attitudes of 44 nurses working in oncology units, and 303 nurses working in medical surgical wards and intensive care units in relation to cancer pain management. The findings indicated that oncology nurses had better understanding of cancer pain management principles, and more positive attitudes towards pain management than non-oncology nurses. Similar findings were reported by Houle (2011), who evaluated the level of cancer pain management knowledge by oncology and non-oncology nurses, with a total sample of 60 nurses who worked either at the Oncology Nursing Society or the American Association of Neuroscience Nurses in Florida (30 nurses from each organisation).

The results revealed that nurses from both organisations were deficient in the knowledge related to cancer pain managements. For example, 70 to 100 percent of the questions on pain management were answered correctly by 60 percent of the oncology nurses; only 30 percent were answered correctly by non-oncology nurses (Houle, 2011). Both studies reported that oncology nurses had better knowledge than non-oncology nurses in relation to general pain management principles. Despite the above studies identifying that oncology nurses had better knowledge than non-oncology nurses, a number of studies conducted in a range of western countries have reported on oncology nurses' lack of knowledge regarding cancer pain management (Alnems, 2012; Smith, 2008; Wang & Tsai, 2010). For instance, Alnems (2012) invited a total of 225 participants from the Oncology Nursing Society in the USA. The results from the Nurses' Knowledge and Attitudes Survey questionnaire showed deficiencies in the knowledge and attitudes of oncology nurses regarding cancer pain management.

In sharp contrast, other studies reported negative level of knowledge among nurses on cancer pain management. Aziato and Adejumo (2014) assessed 14 Ghanaian nurses' knowledge of pain management, with a focused ethnographic design for data collection, at a tertiary teaching hospital. The study found that these nurses knowledge level was low, which was due m to the curriculum gaps during their training, inadequate clinical supervision and lack of follow-up workshops related to pain management. Similar studies conducted in the Middle East have reported poor knowledge related to pain management among oncology nurses (Abdul Rahman, Abu-Saad & Nouredine, 2013; Yildirim, Cicek & Uyar, 2008). For example, in their examination of 68 Turkish oncology nurses' knowledge and attitudes regarding cancer pain management, Yildirim, et al, (2008) found that only 14 out of 39 nurses correctly answered the survey questionnaire regarding pain management. The nurses had very low scores in relation to:

the effectiveness of placebo injections to assess pain; the recommended opioid administration route for persistent pain; the fear of opioid addiction; and over-reporting of pain. However, the highest percentages were obtained for those answers related to considering the patient's cultural background (72.1%), and the use of around the clock protocols for cancer pain (72.1%) (Yildirim, et al, 2008).

A recent study examined the level of 88 Lebanese nurses' knowledge and attitudes towards pain management, and had similar results (Abdul Rahman, Abu-Saad & Nouredine, 2013). The results of Abdul Rahman et al.'s study (2013) revealed a mean score of correct answers of 56.15%, which indicates that participating nurses in the survey had insufficient knowledge regarding pain assessment and management. Two other studies of Jordanian nurses, by Al-Atiyyat (2009), and Al-Khalaileh and Al Qadire (2012) found similar results.

Similar findings were reported by Wang and Tsai (2010) in Taiwan. This study examined the knowledge of 370 nurses working in intensive care, using the Nurses Knowledge and Attitudes Survey (KASRP) Taiwanese version. An overall correct response score was 53.4 percent demonstrated their low levels of pain management. Similar findings were revealed in a study conducted by Tse and Chan (2004) in Hong Kong. The study examined 678 registered nurses' knowledge and attitudes towards pain using the Chinese version of the KASRP questionnaire. More than half of the participants (56 per cent) did not answer the questionnaire correctly, which indicated a poor level of knowledge among Hong Kong nurses in the study.

## **2.2 BARRIERS TO EFFECTIVE CANCER PAIN MANAGEMENT**

Several studies have documented a lack of knowledge concerning cancer pain management among healthcare providers (Al-Khalaileh & Al Qadire, 2012; Elcigil, et al., 2011; Rustøen et al., 2009; Sawyer et al., 2010; Shahnazi et al., 2013). According to these studies, this could be due to inadequate understanding of pharmacology, such as the mechanisms of action, regulatory, and the side effects of pain medications (Sawyer et al., 2010; Shahnazi, et al., 2013).

Other problems identified in relation to knowledge include a fear of addiction when using opioid analgesics, as well as a fear of respiratory depression when high doses of opioids are used (Kaki et al., 2009; Yava et al, 2013). Bernardi et al. (2007) found that nurses had incorrect knowledge about the use of placebos in pain management. This study found that some nurses insisted on using placebos with many patients, despite their ineffectiveness. These barriers are also illustrated in a study conducted in KSA by Kaki et al. (2009). This study asked a total of 300 nurses working in King Khalid National Hospital about their opinion of pain management. Despite the fact that morphine is a commonly used medication, many nurses knew nothing about its duration, peak effect, ceiling effect or safe amounts to be administered. Half of the nurses believed that increasing the dose of morphine was unnecessary, even if the patient had severe pain (Kaki et al., 2009). In contrast, 41.6 per cent of nurses reported a fear of addiction, and could not distinguish between tolerance and physical dependence.

Nurses have a critical role in pain management. They deliver direct patient care, and they need to assess and manage cancer pain throughout the day and night (Machira et al., 2013). Studies have found that many nurses hold negative attitudes or beliefs regarding pain and pain management (Elcigil et al., 2011; Machira et al., 2013; Yava et al., 2013). These negative attitudes and beliefs

could contribute to the under-treatment of pain. Some nurses do not view pain relief as important; neither do they invest the time to assess pain properly (Berben et al, 2012). Other studies have found that a nurse felt reluctant to accept that a patient's self-report is the most trustworthy indicator of pain. They believed that patients sought attention rather than reported real pain (Al Qadire & Al-Khalaileh, 2014a; Aziato & Adejumo, 2014, McCaffery et al, 2000; Pasero & McCaffery, 2010). In contrast, many studies have shown that although nurses have inadequate knowledge of pain management, they have positive attitudes towards pain relief. They also believed that managing pain was crucial to providing quality pain management (Machira et al., 2013; Yava et al., 2013).

Studies indicate the need for interdisciplinary team (nurses, physician, and pharmacist) involvement in pain management to ensure more accurate pain management (Xue et al., 2007). However, a lack of clear communication between healthcare providers especially physicians was negatively related to perceived barriers to pain management (Wang & Tsai 2010; Xue et al., 2007). Rejeh et al (2009) conducted a qualitative study to clarify Iranian nurses' perceptions of the barriers and facilitators influencing their management of post-operative pain. The results revealed that inadequate communication between nurses and physicians was a significant barrier to pain management. This study concluded that establishing a healthy relationship between nurses and patients was vital for good pain management (Rejeh et al., 2009).

In conclusion, findings from the above studies have shown that nurses lack knowledge in cancer pain management and this go on to further affect effective pain management of cancer patients. Several of these studies have been conducted in the western world but limited studies have been conducted in Ghana, it is therefore necessary to assess the knowledge and attitude of nurses in Ghana on effective cancer pain management.

## **CHAPTER THREE**

### **3.0 METHODOLOGY**

#### **3.1 Research Design**

Quantitative research design was used for the study. A cross sectional survey design was used to collect data and analyze the knowledge, attitude and barriers to effective cancer pain management.

#### **3.2 Research setting**

The study was conducted at Komfo Anokye Teaching Hospital in Kumasi, KATH was chosen for the study because it serves as the main referral point for most of the patient diagnosed with cancer in the region and other hospitals. Also a large number of respondents would be involved; furthermore the study has not been carried out at the oncology unit before.

#### **3.3 Study Population**

The population for the sample consisted of all registered nurses working at the oncology unit of KATH.

#### **3.4 Sampling technique**

Simple random sampling method was employed in collecting data from respondents. This gave each respondent the same probability of being selected for the study.

### **3.5 Data collection tool**

A standardized questionnaire was used to collect data from respondents. The questionnaires were in the form of closed ended questions focused on a concise list of key questions. Generally closed ended questions were used in order to limit the extent to which undesirable responses were provided and also to facilitate data analysis.

The questionnaire consisted of four main sections (A to D).

Section A: It covered information on the socio-demographic characteristics of registered nurses

Section B: knowledge level of nurses at the oncology unit of KATH on cancer pain management.

Section C: Attitude of nurses at the oncology unit of KATH on cancer pain management

Section D: Barriers to effective cancer pain management.

### **3.6 Data collection procedure**

The initial step of data collection involved approaching and establishing rapport with nurses at the oncology unit. The questionnaires were then handed to them personally by the researchers. They were required to fill them on their own and return to researcher within 24hrs after filling them.

The questionnaires were collected from the respondents the same day but after some hours. The process of data collection continued until the sample size was covered.

**Inclusion criteria**

Staff nurses working at the oncology unit of KATH with more than 1 year working experience and willing to participate

**Exclusion criteria**

Staff nurses having less than 1 year working experience

**3.7 Data analysis**

Statistical package for social sciences (SPSS) was used to analyze data. Frequencies tables and charts were used to interpret the results obtained from respondents.

**3.8 Validity and Reliability**

The data collection tool was piloted on 10 nurses at the KATH oncology unit to determine the feasibility of the study, identify problems in the research design, refine the data collection and analysis plan, and test the instrument that was used in the major study to give the researchers some experience with the subjects, methodology and instrument. Research questions were then revised before administered to the real respondents to check the clarity and consistency of the questions.

**3.9 Ethical Consideration**

Introductory letter from the school was sent to the Administrator of the hospital to seek permission for the study. Ethical clearance was obtained from the Committee on Human Research, Publications and Ethics of the School of Medical Sciences, KNUST and KATH. In the informed consent process, explanation was given to the respondents about the purpose of the



study, before those who consented were enrolled into the study. Those who agreed to participate in the study signed the consent form. Anonymity was maintained as respondents were not required to write their names on the questionnaire. Participants were not forced to take part in the study against their will and they were informed that they have the right to participate in the study or withdraw from the study at any time.

## CHAPTER FOUR

### DATA PRESENTATION AND ANALYSIS

This chapter is devoted to the analysis and implementation of the data obtained from the field. The analysis covers the characteristics of the respondents, knowledge of nurses on cancer pain management, attitude of nurses towards cancer pain management and barriers to effective cancer pain management.

#### 4.1 SOCIO – DEMOGRAPHIC DATA

**TABLE 4.1:** Age group of respondents

AGE GROUP	FREQUENCY	PERCENTAGE (%)
26 – 30	8	53.3
31 - 35	5	33.3
36 – 40	2	13.3
> 41	0	0
<b>Total</b>	<b>15</b>	<b>100</b>

The table 4.1 shows the age distribution of the respondents, 8 (53.3%) were between the ages of 26 – 30, 5 (33.3%) were between the ages of 31 – 35, 2 (13.3%) were between the ages of 36 –

40 whiles none of the respondents were above 40 years of age. This indicates that majority of the respondents were aged 26-30.

**TABLE 4.2:** Number of years of practicing nursing

<b>YEARS</b>	<b>FREQUENCY</b>	<b>PERCENTAGE (%)</b>
1 - 3	3	20
4 - 6	10	66.7
7 – 10	1	6.7
> 11	1	6.7
<b>TOTAL</b>	15	100

Considering the number of years of practicing nursing, 10 (66.7%) have worked from four to six years, three (20%) have worked for one to three years whiles one (6.7%) has worked for seven to ten years and more than 11 years respectively.

**TABLE 4.3:** Area of specialty of respondents

<b>SPECIALTY</b>	<b>FREQUENCY</b>	<b>PERCENTAGE (%)</b>
General nursing	10	66.7
Midwifery	2	13.3
Oncology	3	20
<b>TOTAL</b>	<b>15</b>	<b>100</b>

With respect to the area of specialty of respondents, 10 (66.7%) were general nurses and had not specialized yet, 3 (20%) were oncology nurses while the least 2 (13.3%) were midwives. This implies that the study was dominated by general nurses.

**TABLE 4.4: Highest level of education**

<b>LEVEL OF EDUCATION</b>	<b>FREQUENCY</b>	<b>PERCENTAGE (%)</b>
Diploma	10	66.7
Degree	3	20.0
Master's degree	2	13.3
<b>TOTAL</b>	<b>15</b>	<b>100</b>

Considering the highest level of education of respondents, Many 10 (66.7%) were diploma holders, 3 (20.0%) had Bachelor's degree whiles the least 2 (13.3%) were master's degree holders.

#### 4.2 KNOWLEDGE OF NURSES ON CANCER PAIN MANAGEMENT

**Table 4.5 showing the knowledge of nurses on cancer pain management**

<b>Question</b>	<b>Correct response Frequency n(13)</b>	<b>Percentage (%)</b>
The most accurate judge of the intensity of the cancer patient's pain is .....	14	93.3
Which of the following is used in assessing patient's level of pain?	13	86.7
What are the preferred analgesics for managing cancer pain?	14	93.3
The recommended route of administration of analgesics for patients with persistent cancer-related pain is .....	13	86.7
Which of the following analgesic medications is considered the drug of choice for the treatment of prolonged moderate to severe pain for cancer patients?	15	100
Which of the following is most useful for treatment of acute cancer pain?	12	80
The time to peak effect for morphine given IV is .....	6	40
<b>Mean score</b>		<b>82.9%</b>

When respondents were asked about the most accurate indicator of the intensity of the cancer patient's pain, 14 (93.3%) had it right which was the patient.

When asked about the scale used in assessing pain among cancer patients, 13 (86.7%) had it right, the right answer being the numerical rating scale.

Majority 14 (93.3%) knew the preferred analgesics for managing cancer pain, the right response was opioids.

13 (86.7%) knew the recommended route of administration of analgesics for patients with persistent cancer-related pain, the right answer was intravenous route.

When asked about drug of choice for the treatment of prolonged moderate to severe pain for cancer patients, all 15 (100%) had it right, none of the respondents gave a wrong response. The right response was opioids.

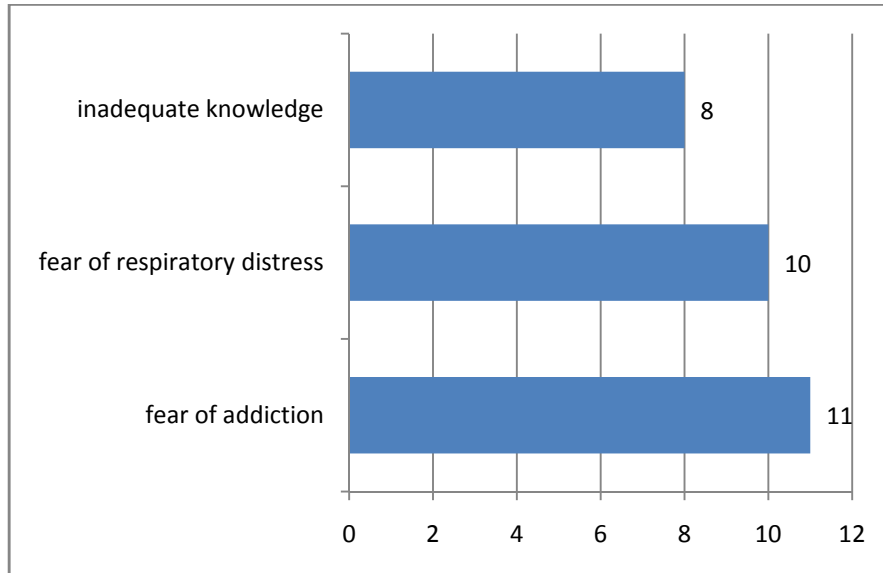
### 4.3 ATTITUDE OF NURSES

**Table 4.6 showing nurses attitude towards effective cancer pain management**

<b>Attitude</b>	<b>Frequency n(13)</b>	<b>Percentage (100%)</b>
Are you willing to administer opioids to cancer patients?	14	93.3
Do you serve opioids on a regular schedule?	13	86.7
Do you assess cancer patients' pain before administering opioids?	10	66.7

In reference to attitude of respondents towards cancer pain management, most 14 (93.3%) of the respondents were willing to administer opioids to cancer patients, 13 (86.7%) said they served opioids on a regular schedule and not on PRN basis. Lastly, 10 (66.7%) said they assessed they assessed the pain of patients before serving opioids. It can therefore be concluded from the table above that nurses working at the oncology unit of KATH have positive attitudes towards pain management.

**Fig 1.NURSES RELATED BARRIERS TO EFFECTIVE CANCER PAIN  
MANAGEMENT**



The graph presented in figure 1 above shows the nurses related barriers to effective cancer pain management, 11 (73.3%) said their major barrier to effective pain management was fear of addiction to opioids, fear of respiratory distress was also identified by 10 (66.7%) of respondents and inadequate knowledge was identified by the least of respondents 8 (53.3%). It can therefore be deduced from the graph that fear of addiction was the major nurses related barrier to effective cancer pain management.



## **CHAPTER FIVE**

### **DISCUSSING, CONCLUSION AND RECOMMENDATION**

#### **5.0 INTRODUCTION**

This chapter presents the findings of the study on knowledge, attitude and barriers to effective cancer pain management among nurses at KATH oncology unit. A sample of 15 was used to generate the information. The participants included registered nurses working at the oncology unit.

In relation to the socio demographic characteristics of respondents, the mean age of respondents was 31 years. The average number of years spent by respondents was 5 years. In relation to their area of specialty, most of them (66.7%) were general nurses' whiles the least were midwives (13.3%). Also with respect to the educational level of respondents, 10 (66.7%) were diploma holders and master's degree holders accounted for 13.3%.

Our study showed important information on the knowledge of nurses on cancer pain management at the oncology unit of the Komfo Anokye Teaching Hospital in Kumasi. The findings showed that nurses who were working at the unit had sufficient knowledge about cancer pain management.

Firstly, out of the seven questions examined, the mean score for correctly answered question was (82.9%) correct answer rate). Several factors could be accounted for the higher knowledge of respondents on cancer pain management. With the average of 5 years working experience, respondents might have had the opportunity of attending workshops on cancer pain management and also whiles working might have gathered the knowledge through experiences. Result

obtained is contradictory to that of Wang & Tsai (2004); Rahman et al (2013); Yildrem et al, (2008) where nurses she studied had low level of knowledge on cancer pain management.

The knowledge level of general nurses was higher than that of the oncology nurses, with their mean scores being 90 and 80 respectively. Results obtained is contradictory to that of Rushton et al. (2003) who investigated the knowledge and attitudes of 44 nurses working in oncology units at university of UTAH. He reported that oncology nurses had better understanding of cancer pain management principles and also had more positive attitudes towards pain management than non-oncology nurses.

Also, results from the study also revealed that respondents had adequate knowledge on pain assessment tools (86.7%). This could be due to the fact that nurses at the oncology unit use pain assessment tools in assessing the level of pain experienced by cancer patients. This finding is contradictory to that of Rahman (2013) where majority of respondents he studied had less knowledge on pain assessment tool and did not know that the numerical scale was used in assessing cancer pain.

Despite respondents having a high mean score on knowledge on cancer pain management, they had lower score 40% in relation to time to peak effect for morphine given intravenously. This could be due to the fact that nurses at the oncology unit do not have enough knowledge on the pharmacological properties of opioids such as morphine. This is similar results obtained by Houle (2011) & Alnems (2012) where majority of nurses showed knowledge deficiency regarding pharmacology in cancer pain management.

Findings from the study also suggested that nurses had positive attitude towards cancer pain management. Nurses were willing to administer opioids to cancer pain management (93.3%),

serve opioids on a regular schedule (86.7%) and assess patient pain before administering opioids (66.7%). Factors that could be accountable for positive attitude of respondents could be their higher levels of knowledge on cancer pain management, since nurses with higher levels of knowledge tend to have positive attitude because they are well-informed. Similar results were also obtained by Machira et al (2013); Yava et al (2013) where nurses had positive attitude towards pain management and believed that managing pain was crucial to providing quality pain management. Results obtained is contradictory that of Elcigil et al, (2011) where nurses had negative attitude and beliefs towards cancer pain management and did not view pain relief as important. Findings is also contradictory to that go Berben et al (2012) where nurses felt reluctant to accept that patient's self-report is the most trustworthy indicator of pain.

Nurses identified fear of addiction (73.3%), inadequate knowledge on cancer pain management (53.3%) and fear of respiratory distress (66.7%) as major barriers in effective cancer pain management. This result is similar to that of (Kaki et al., 2009; Yava et al, 2013) where nurses were reluctant to give opioids because of fear of addiction. Aziato and Adejumo (2014) also identified low levels of knowledge as the major barrier to effective cancer pain management.

## **5.4 CONCLUSION**

In conclusion, the study was conducted to assess the knowledge and attitude of nurses on cancer pain management and also identify the barriers to effective cancer pain management. Results from the study indicated that nurses working at the oncology unit have adequate knowledge on cancer pain management with the mean score of 80.2% as well as positive attitudes. Nurses were willing to administer opioids, served opioids at regular time and also assessed patient's pain

before administering. Barriers identified by nurses included fear of addiction, fear of respiratory distress and inadequate knowledge.

Results indicated that nurses working at the oncology unit have adequate knowledge on cancer pain management however there was deficient knowledge in the pharmacology of opioids such as morphine. The research proposes that further studies should be conducted to assess nurses' knowledge on pain medications this will help to identifying the gaps in knowledge in the pharmacology.

## **5.5 RECOMMENDATION**

The study showed that nurses working at the oncology unit of KATH have adequate knowledge with respect to effective management of cancer pain. The implications for nursing related to this study are many and these findings should increase efforts to educate new nurses, which will result in greater knowledge and should encourage nurses to develop more in-depth pain management knowledge programs at the time of orientation. Structured plans following most current evidence-based pain management guidelines and references should be utilized in patient care.

Moreover, nurses must be educated continuously through educational sessions and workshops which focus on current cancer pain management and pain medication, their time of peak and indication.

However, since the study depicted that general nurses had more knowledge in cancer pain management, we recommend that after working for more than 3 years with some little advance

training, general nurses can be considered as oncology specialist nurses and therefore we encourage on the job training.

Lastly, pain medication and management should form an integral part of the curriculum of nursing students. Advancing the knowledge base of nurses regarding pain management will improve outcomes for patients and will ultimately result in better end of life care.

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## APPENDIX 1

### QUESTIONNAIRE

Dear participant,

We are final year students of Christian Service University College. In partial fulfillment of our undergraduate programme, we are conducting a research titled '**knowledge, attitude and barriers to effective cancer pain management among nurses at KATH oncology directorate**'. We would be grateful if you could respond to the following questions to enable us carry out the research work. You are assured of confidentiality and anonymity throughout the study.

#### SECTION A: SOCIO-DEMOGRAPHIC CHARACTERISTICS

Please tick or write where appropriate

1. Age

a. 21-25 ( )      b. 26 - 30 ( )      c. 31 – 35 ( )      d. 36 - 40 ( )      e. > 41 ( )

f. 46 and above ( )

2. Number of years practicing nursing

a. 1 – 3 ( )      b. 4 - 6 ( )      c. 7 – 10 ( )      d. > 11 ( )

3. Area of specialty

a. General Nursing ( )      b. Midwifery ( )      c. Oncology

d. others specify .....

4. Highest educational level

- a. Certificate ( )      b. Diploma ( )      c. Bachelor's degree ( )      d. Masters ( )

### **KNOWLEDGE ON CANCER PAIN MANAGEMENT**

5. The most accurate judge of the intensity of the cancer patient's pain is \_\_\_\_\_

- a. The treating physician
- b. The patient
- c. The patient's spouse or family

6. Which of the following is used in assessing patient's level of pain?

- a. Glasgow coma scale
- b. numerical rating scale
- c. Hawkins scale

7. What are the preferred analgesics for managing cancer pain? (choose all that apply)

- a. non opioids
- b. opioids
- c. NSAIDS

8. The recommended route of administration of analgesics for patients with persistent cancer-related pain is \_\_\_\_\_

- a. Intravenous
- b. Intramuscular
- c. Subcutaneous

9. Which of the following analgesic medications is considered the drug of choice for the treatment of prolonged moderate to severe pain for cancer patients?

- a. Codeine
- b. Morphine
- c. Meperidine
- d. Tramadol

10. Which of the following is most useful for treatment of acute cancer pain?

- a. Ibuprofen (Motrin)
- b. Hydromorphone (Dilaudid)
- c. Gabapentin (Neurontin)
- d. All of the above

11. The time to peak effect for morphine given IV is \_\_\_\_\_

- a. 15 min.
- b. 45 min.
- c. 1 hour
- d. 2 hours

## **ATTITUDE ON CANCER PAIN MANAGEMENT**

12. Are you willing to give opioids to cancer patient in pain?

Yes ( ) No ( )

13. Do you serve pain medications according to a regular schedule?

Yes ( ) No ( )

14. Do you assess patient's pain before serving medication?

Yes ( ) No ( )

## **NURSES RELATED BARRIERS TO EFFECTIVE MANAGEMENT OF CANCER PAIN**

Which of the following nurses related factors do you think affect effective cancer pain management?

***NBPlease tick as appropriate. You can tick more than one***

- i. Fear of addiction ( )
- ii. Fear of respiratory distress ( )
- iii. Inadequate knowledge on pain assessment ( )

Research on Knowledge, Attitude and Barriers to Effective Cancer Pain Management among  
Nurses at Kath Oncology Unit

**CONSENT FORM**

ISSUE	RESPONDENT'S INITIAL
I have read the information letter about the study “ knowledge, attitude and barriers to effective cancer pain management among nurses at KATH Oncology Unit “	
I have had the opportunity to ask any questions related to this study and received satisfactory answers to my questions and any additional details I wanted.	
I am also aware that excerpts from the questionnaire may be included in publications to come from this research personal details will be kept anonymous	
I understand that relevant sections of the data collected during the study may be reviewed by individuals from the research and development unit of KATH, where it is relevant to my taking part in this research. I give permission for this individual to have access to my responses.	



With full knowledge of all foregoing, i agree to participate in this study. I agree to being contacted again by the researcher if my responses give rise to interesting findings.

☐ No

☐ Yes

If yes, my preferred method of being contacted is

☐ Telephone

☐ Email

☐ Other

Participant's Name		Consent taken by	
Participant's Signature		Signature	
Date		Date	